OM nucleic

Run on:

```
CR900936 Sus escreticos
BR429624 TAS002.B0
BR439616 WHES602 H
CZ891668 Egha001£0
CX6939214 wreln.pk0
CK6939214 wreln.pk0
CR085812 hg17a01.g
DX171753 OR ABa003
CK7488931 mkf2-159E
OK400766 NISC mp11
AZ704872 RPCI-23-2
CE742874 tigr-gss-
AZ704151 RPCI-23-2
DX172123 OR ABa003
DUZ24130 103857415
AW641002 cm02c07.w
BR492287 WHE0557 B
         A0514846 HS.515957
CN184559 UCKCS04 0
B2379446 SALK 1133
AW680443 WS1 5 B12
CX538294 813 GN741E
A0130921 HS 3027 B
DV773477 MCC1111CO
                                                                                                                                                                                                                                                                                                                                                                                                          CW375149 622 07 bp DNA linear GSS 01-NOV-2004 febb001f052g07k0 Sorghum methylation filtered library (LibID: 104) Sorghum bicolor genomic clone febb001f052g07, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sorghum bicolor (sorghum)

Sorghum bicolor

Sorghum bicolor

Sorghum bicolor

Sorghum bicolor

Sorghum bicolor

Sorghum bicolor

Spermatophyta; Vitighiantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD

clade; Panicoldeae; Andropogoneae; Sorghum.

1 (bases 1 to 627)

1 (bases 1 to 627)

Medell,J.A., Budiman,M.A., Nunberg,A., Citek,R.W., Robbins,D.,

Jones,J., Filck,E., Rohlfing,T., Fries,J., Bradford,K.,

McMenamy,J., Smith,M., Holeman,H., Roe,B.A, Wiley,G., Korf,I.F.,

McMenamy,J., Lakey,N., McCombie,W.R., Jeddeloh,J.A. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .627
/organism="Sorghum bicolor"
/mol type="genomic DNA"
/cultivar="ATx623"
/db_xref="taxon:4558"
/clone="fsbb001f052g07"
/clone="fsbb001f052g07"
/clone="fsbb001f052g07"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sorghum genome seguencing by methylation filtration Pros Biol. 3 (1), e13 (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Orion Genomics, LLC
4041 Forest Park Ave, St. Louis, MO 63108, USA
Tel: 314 615 6979
Email: jbedell@oriongenomics.com
Plate: fsbboolifo52 row: g column: 07
Email: keverse
Class: methylation filtered
                                                                                                                                                                                                                                                                                                                                                  ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    High quality sequence stop: 627.
Location/Qualifiers
                                             AW680443
CX538294
DV733091
DV733477
CR900936
BB429624
BBH36116
CZ891668
CX891668
CX89121
CR698214
CB085812
CR488931
BQ400766
AZ704872
CR704872
CR704872
CR704872
                                                                                                                                                                                                                                                                      DU224130
AW641002
                                    BZ379446
                                                                                                                                                                                                                                                                                                            CE178051
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CW375149
CW375149.1 GI:55093593
                                               7 10 17
                                                                                                                       4133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Bedell JA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Martienssen, R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15660154
CW375149/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1
0 0 0 0 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CW375149 fsbb001f0
CW58112 104 723 1
CW375148 fsbb001f0
CT013281 KBrH12111
DU750205 ASNF1346.
CL214499 TAM32-17E
CL219260 ZMBBC042
DX327753 OR ABB024
CX687527 ydd3Cc08.
CX687527 ydd3Cc08.
CX68942 ydc22f05.
DT673917 813d1765C
BH557567 BOGOG92TF
BH55767 BOGOG92TF
CX6872466 BB212456
BB36985 BB36985
BG264482 daaa9f112.
CC812860 ZMMBBC052
                                                                          November 3, 2006, 20:51:16; Search time 2057.56 Seconds (without alignments) 12719.092 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                        1 tgaaaataaatggaacacac......tggatgattgcaggagattt 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
         GenCore version 5.1.9
Copyright (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                     96473154
                                                                                                                                                                                                                   48236798 segs, 27959665780 residues
                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CW375148
CT013281
DU750205
CC314499
CL219260
DX327753
CX687527
CX687527
                                                       nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                  summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BH557567
BZ162280
BU795670
BB212456
BB369985
BQ803876
BG264482
CC812860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DT673917
                                                                                                                                                                             OLIGO_NUC
Gapop_60.0 , Gapext 60.0
                                                                                                                                                                                                                                                                                                                              Post-processing: Listing first 45
                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12
                                                                                                                           US-10-764-316-5
468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                   9b_est1::
9b_est3::
9b_est4::
9b_est6::
9b_htc::
9b_est7::
9b_est8::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gb_gss1:*
gb_gss2:*
gb_gss3:*
gb_gss4:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     627
689
983
983
1217
245
611
613
626
640
679
785
896
230
281
281
412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                               Scoring table:
```

Word size :

Searched:

Sequence:

Database :

Score

Result

υ υυ

O U

111122222222222222

υυυ

01-NOV-2004

```
CT013281

SB1 bp DNA linear GSS 09-AUG-2005
KBrH111111 genomic clone, KBrH (HindIII) BAC library Brassica rapa subsp. pekinensis, genomic survey sequence.
CT013281. GI:11477141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    finite="Organ: leaf; Vector: pBCSK(-); Site 1: HincII; DNA prepared from purified nuclei was randomly sheared, end-repaired, size fractionated to enrich for the 0.5 to 5 to 5 to faction, ligated into HincII-digested pBCSK(-) vector and electroporated into E. coli cells. This is a methylation filtered library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Brassica rapa subsp. pekinensis
Brassica rapa subsp. pekinensis
Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
                                                                                                                                                                                                                                                                                                                           Editaryora, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Manollophyta; Liliopsida; Poales; Poaceae; PACAD Spermatophyta; Maropogoneae; Sorghum.

clade; Panicoideae; Andropogoneae; Sorghum.

l (bases I to 682)

Bedell, J.A., Budiman, M.A., Nunberg, A., Citek, R.W., Robbins, D., Bools, J., Flick, R., Rohlfing, T., Fries, J., Bradford, K., Robbins, D., Rabinowicz, P.D., Smith, M., Holeman, H., Roe, B.A, Wiley, G., Korf, I.F., Rabinowicz, P.D., Lakey, N., McCombie, W.R., Jeddeloh, J.A. and Martiensen, R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="taxon:4558"
/clone="febb001f052g07"
/clone_lib="Sorghum methylation filtered library (LibID:
104)"
                                                                                                     682 bp DNA linear GSS 01-NOV-200 fabb001f052g07f0 Sorghum methylation filtered library (LibID: 104) Sorghum bicolor genomic clone fabb001f052g07, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.5%; Score 21; DB 13; Length 682; 100.0%; Pred. No. 7.1; c. ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sorghum genome sequencing by methylation filtration PLoS Biol. 3 (1), e13 (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Bedell JA
Contact: Bedell JA
Corton Genomics, LLC
4041 Forest Park Ave, St. Louis, MO 63108, USA
4041 Forest Park Ave, St. Louis, MO 63108, USA
Tel: 314 615 6975
Email: jbedell@oriongenomics.com
Flate: fabb00116052 row: g column: 07
Seq primer: f Forward
Class: methylation filtered
High quality sequence stop: 682.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Sorghum bicolor"
/mol type="genomic DNA"
/cultivar="ATx623"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TGAAATAAATGGAACACACA 21
TGAAAATAAATGGAACACACA 405
                                                                                                                                                                                                                                                                                              Sorghum bicolor (sorghum)
Sorghum bicolor
                                                                                                                                                                                                                                               CW375148.1 GI:55093592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15660154
                                                                                                                                                                                                                                                                                 GSS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 4
CT013281/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
             425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             вописе
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                   RESULT 3
CW375148
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /no, e-morgan: leaf; Vector: pBCSK(-); Site 1: Hincil; DNA prepared from purified nuclei was randomly sheared, end-repaired, size fractionated to enrich for the 0.5 to 5 b fraction, ligated into Hincil algested pBCSK(-) vector and electroporated into E. coli cells. This is a methylation filtered library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CW258112
104 723 11227699 116 35158 066 Sorghum methylation filtered library
(Libra: 104) Sorghum bicolor genomic clone 11227699, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sorghum bicolor (sorghum)
Sorghum bicolor
Sormatophyta; Wagnollophyta; Liliopaida; Poales; Poaceae; PACCAD
Spermatophyta; Magnollophyta; Liliopaida; Poales; Poaceae; PACCAD
Solade; Panicoideae; Andropogoneae; Sorghum.

(bases 1 to 649)
Bedell,J.A., Budiman,M.A., Nunberg,A., Citek,R.W., Robbins,D.,
Bedell,J.A., Filck,E., Rohlfing,T., Fries,J., Bradford,K.,
McMenamy,J., Smith,M., Holeman,H., Roe,B.A, Wiley,G., Korf,I.F.,
Rabinowicz,P.D., Lakey,N., McCombie,W.R., Jeddeloh,J.A. and
Martienssen,R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .649
/organism="Sorghum bicolor"
/organism="Sorghum bicolor"
/oroltivar="Arx873"
/db_xref="taxon:4558"
/clone="1127699"
/clone="lib="Sorghum methylation filtered library (LibID:
                                                                                                                                                                                                                                                                    ö
                  /note="Organ: leaf; Vector: pBCSK(-); Site_1: HincII; DNA prepared from purified nuclei was randomly sheared, end-repaired, size fractionated to enrich for the 0.5 to 5 b fraction, ligated into HincII digested pBCSK(-) vector and electroporated into E. coli cells. This is a methylation filtered library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ch 1. Similarity 100.0%; Pred. No. 7; 21; Conservative 0; Mismarches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sorghum genome sequencing by methylation filtration PLoS Biol. 3 (1), e13 (2005)
                                                                                                                                                                                                                  4.5%; Score 21, DB 13; Length 627; 100.0%; Pred. No. 7; o; Indels :ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Bedell JA
Orion Genomics, LiC
Orion Genomics, LiC
4041 Perset Park Ave, St. Louis, MO 63108, US/
4041 Perset Park Ave, St. Louis, MO 63108, US/
Tel: 314 615 6979
Email: jbedell@oriongenomics.com
Email: jbedell@oriongenomics.com
Plate: 723 row: o column: 19
Seq primer: T3 Reverse
Class: methylation filtered
High quality sequence stop: 649.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 TGAAATAAATGGAACACACA 21
                                                                                                                                                                                                                                                                                                                                                          467 TGAAAATAAATGGAACACACA 447
                                                                                                                                                                                                                                                                                                                             1 TGAAAATAAATGGAACACACA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bequence.
CW258112
CW258112.1 GI:54966939
                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.0
Whiches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15660154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
```

TITLE JOURNAL PUBMED COMMENT

FEATURES

ACCESSION VERSION KEYWORDS SOURCE ORGANISM

REFERENCE AUTHORS

LOCUS DEFINITION

RESULT 2 CW258112/c

ઠે 셤

ORIGIN

ö

Gape ö

> Local Best Loc Matches

ð

ORIGIN

```
21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local 8
                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CC314499/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: PwRichardson@lbl.gov; delong@mit.edu
North Pacific Subtropical Gyre (Hawaii) picoplankton genomic fosmid
DNA library prepared from marine picoplankton in the less than 1.6
                                                                                                                                                                                                                                                                                                                                                                          Bielefeld, Germany
Contact: Bernd Weisshaar
Bielefeld, University, Institute for Genome Research
Bielefeld University, Institute for Genome Research
Bielefeld, Germany Email:
Bard.weisshaar@uni-bielefeld.de
Bard.weisshaar@uni-bielefeld.de
Bard.weisshaar@uni-bielefeld.de
Bard.weisshaar@uni-bielefeld.de
Bard.weisshaar@uni-bielefeld.de
Bard.weisshaar@uni-bielefeld.de
Bard.weisshaar@uni-bielefeld.de
Bard.weisshaar@uni-bielefeld.de
Bard.weisshaar.ge
Bard.weisshaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GSS 27-JAN-2006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          uncultured marine microorganism HF130 10-06-02
uncultured marine microorganism HF130 10-06-02
unclassified acquences; environmental samples.
1 (bases 1 to 999)
DeLong,E.F., Preston,C.M., Mincer,T., Rich,V., Hallam,S.J.,
Prigaard,N.U., Martinez,A., Sullivan,M., Edwards,R., Chisholm,S.W.
and Rarl,D.M.
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; eurosids II; Brassicales; Brassicaceae; Brassica.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Science (2006) In press
Context: Susan Lucas, Alex Copeland, Sam Pitluck, Alla Lapidus,
Kerrie Barry, Tijana Glavinadelrio, David Bruce, Paul Richardson
and Edward DeLong
                                                                                                                                                                                                                                                                                                            Submitted (09-AUG-2005) Weisshaar B., Bielefeld University,
Institute for Genome Research, Universitaetsstrasse 25, D-33594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone_lib="KBrH, Brassica rapa HindIII BAC library GF-SCF-1002, Vector: pCUGIBac1" /lab_host="E.coli DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Comparative genomics reveals ecological trends in stratified microbial communities in the ocean's interior
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ASNF1346.92 HF130_10-06-02 uncultured marine microorganism HF130_10-06-02 genomic clone HF0130_014B01, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US DOE Joint Genome Institute
US DOE Joint Genome Institute
2800 Mitchell Drive Bl00, Walnut Creek, CA 94598-1698,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Brassica rapa subsp. pekinensis"
/mol_type="genomic DNA"
/strain="chiifu type 401-42"
/cultivar="Chiifu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.5%; Score 21; DB 14; Length 983; 100.0%; Pred. No. 7.2; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                               Viehoever,P., Holtgraewe,D. and Weisshaar,B.
BAC end sequences of Brassica rapa
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /sub_species="pekinensis"
/db_xref="taxon:51351"
/clone="KBrH121117"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    dq 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               324 TIGGIAATGAIGITTTCTICT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 821 riceraargarcrrrrrrrrrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DU750205
DU750205.1 GI:85760041
                                                                                                                                                                                                     2 (bases 1 to 983)
Li,Y. and Weisshaar,B.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: 617-253-5271
Fax: 617-253-2679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 21; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DU750205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                             JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
DU750205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
```

ઠે g

```
/clone="HF0130 01480" / /clone="HF0130 014801" / /clone="HF0130 014801" / /cell type="marine picoplankton, less than 1.8 um, greater than 0.22 um fraction" / clone lib="HF130 10-06-02" / note="Vector: pCCIPOS; North Pacific Subtropical Gyre (Hawaii) picoplankton genomic fosmid DNA library prepared from marine picoplankton in the less than 1.6 um, greater than 0.22 um fraction. Picoplankton collected at 130 m depth on 10/6/2002, Coordinates: 22.45 N, 158 W. Sample Date: 10/6/2002 Coordinates: 22.45 N, 158 W Depth 130 m Temperature: 22.19 C Salinity: 35.31 psu Oxygen: 204.9 umol/kg"
                                                                                                                                                                                              /organism="uncultured marine microorganism HF130_10-06-02"
/mol type="genomic DNA"
/db_xref="taxon:361146"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC314499 12-MAY-2003 TAM32 Gallus gallus genomic clone TAM32-17E11,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gallus gallus (chicken)
Gallus gallus
Gallus gallus
Gallus gallus
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
Phasianinae; Gallus.
I (bases I to 1217)
Kremitzki, C., Higginbotham, J., Wylie, K., Carter, J., McPherson, J., Warren, W., Graves, T., Mardis, E. and Wilson, R.
Gallus gallus BAC End Reads
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /Gex="female"
/cell line="UCD001, inbred 256"
/clone_lib="TAM32"
/note="Vector: pECBAC1; Site_1: ECORI; Site_2: ECORI;
TAM32 Female Chicken library - for library and clone
ordering information: http://www.hbz.tamu.edu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
um, greater than 0.22 um fraction. Sample Date: 10/6/2002
Coordinates: 22.45 N, 158 W Depth 130 m Temperature: 22.19
Salinity: 35.31 psu Oxygen: 204.9 umol/kg
Class: fosmid ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.5%; Score 21; DB 14; Length 999; 100.0%; Pred. No. 7.2; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Genome Sequencing Center
Washington University School of Medicine
Email: submissions@watson.wustl.edu
Insert Leugth: 152000 Std Error: 0.00
Seq primer: ECI TACGACTCACTATAGGGCG
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="genomic_DNA"
/strain="Red_Jungle Fowl"
/db_xref="taxon:9031"
/clone="TAM32-17E11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Gallus gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     High quality sequence start: 19
High quality sequence stop: 763.
Location/Qualifiers
                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               254 AGAAGAGCTGATGAGGTGATT 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  261 AGAAGAGCTGATGAGGTGATT 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC314499
CC314499.1 GI:30708554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7121. .1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
```

셤 ઠ

```
CX687527 613 bp mRNA linear EST 19-JAN-2005 ydd80c08.y2 Sea urchin EST Lib1 Strongylocentrotus purpuratus cDNA clone ydd80c08 5', mRNA sequence.
CX687527 CX687527 GI:57948974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Strongylocentrotus purpuratus
Strongylocentrotus purpuratus
Strongylocentrotus purpuratus
Suraryota; Metazoa; Echinodea; Echinoida;
Echinoidea; Buechinoidae; Echinoca; Echinoida;
Strongylocentrotidae; Strongylocentrotus.
1 (Dases 1 to 613)
Coffman, J.A., Robertson, A.J., Clifton, S., Pape, D., Hillier, L.,
Coffman, J.A., Robertson, A.J., Meyer, R., Theising, B., Bowers, Y.,
Gifbons, M., Ronko, I., Tasgareishvili, R., Ritter, E., Kennedy, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone lib="OR ABa"
/note="Vector: pAGIBAC1, Site_1: HindIII, Site_2: HindIII"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: est@watson.wustl.edu
Email: est@watson.wustl.edu
Seq perdencing by: Washington University Genome Sequencing Center
Seq primer: -28RFpOT
High quality sequence stop: 613.
Location/Qualifiers
Kim, H., Collura, K., Wissotski, M., Byrne, M., Stum, D., Smart, D.,
Rao, K., Luo, M., Jetty, R., Kudrna, D., Muller, C., Soderlund, C. and
                                                   OWAP (Oryza Map Alignment Project) - Arizona Genomics Institute Unpublished (2005)
Contact: Rod A. Wing
Arizona Genomics Institute
University of Arizona
Forbes Building Room 303, Tucson, AZ 85721-0036, USA
Tel: 520 626 9595
Fax: 520 621 1259
Email: rwing@genome.arizona.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wilson,R.
WashU Sea Urchin EST Project
Unpublished (2004)
Contact: Dr. James A. Coffman
WashU Sea urchin EST Project
Washington University School of Medicine
4444 Forest Parkway, Box 8501, St. Louis, MO 63108
Fax: 314 286 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Strongylocentrotus purpuratus"
/mol_type="mRNA"
/db_xref="texon:7668"
/clone="ydd80c08"
/lab_host="DH108"
/clone_lb="Sea urchin EST Lib1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 611;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.3%; Score 20; DB
illarity 100.0%; Pred. No. 26;
Conservative 0; Mismatches
                                                                                                                                                                                                                                                                          Location/Qualifiers
1. 611
/organism="Oryza ridleyi"
                                                                                                                                                                                                                                                                                                                                     /mol type="genomic DNA"
/db_xref="taxon:83308"
/db_xref="taxon:83308"
/clone="tox Aba0248005"
/tisene="type="leaves"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    334 TGTTTTCTTCAACCCATG 353
                                                                                                                                                                                                                                                                 Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 20; Conserv
                                               Wing, R.
OMAP (O)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                             Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                    TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 9
CX687527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DX3277S3

OR_ABa0248005.r OR_ABa Oryza ridleyi genomic clone OR_ABa0248005

3', genomic survey sequence.

DX327753.1 GI:85604539

GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oryza ridleyi
Oryza ridleyi
Oryza ridleyi
Eukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae, BEP
clade; Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                 Contact: Bharti,A.K.
Dr.Joachim Messing's lab
The Plant Genome Initiative at Rutgers, Waksman Institute, Rutgers
                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Viridiplantae; Streptophyta; Eukaryothyta; Magnoliophyta; Liliopsida; Poales; Paccao; Calda; Panticoldes; Andropogones; Zea.

1 (bases 1 to 245)
Bharti,A.K., Young,S., Kavchok,S., Keizer,G., Bronzino,A.C., Schovetz,V., Fuka,G., Yu,Y., Wing,R. and Messing,J.
Sequencing of the maize genome at PGIR (2003c)
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="Wector: pTARBAC1.3; Site_1: BamHI; Site_2: BamHI"
                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.3%; Score 20; DB 13; Length 245; 100.0%; Pred. No. 25; 1, Indels 1, Mismatches 0; Indels
                                     4.5%; Score 21; DB 12; Length 1217;
100.0%; Pred. No. 7.3;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    University
190 Frelinghuysen Road, Piscataway, NJ 08854, USA
Tel: 732 445 5735
Fax: 732 445 5735
Email: bharti@waksman.rutgers.edu
Seq primer: T7
Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /db xref="taxon:4577"
/clone="zmMBBC0429L12"
/lab_host="E. coli DH10B"
/clone_l1b="zmMBBC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="genomic DNA"
/cultivar="B73"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Zea mays"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       248 TCAAACAGAAGAGCTGATGA 267
                                                                                                                                              1 TGAAAATAAATGGAACACACA 21
                                                                                                                                                                                                                                                                                                                                         CL219260.1 GI:40751934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20; Conservative
                                                                 1 Similarity 100.
21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                   Zеа шаув
                                                                                                                                                                                                                                                                                                                                                                                                       Zea mays
                                               Query Match
Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 8
DX327753/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                            RESULT 7
CL219260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JERSION
```

ORIGIN

ઠ g

ö

Gape

```
Lollum temulentum

SM Lollum temulentum

Bukaryota, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopeida; Poales; Poaceae; BEP clade; Pooleae; Poeae; Lollum.

El (bases 1 to 640)

SS Wang, Z.Y., Mann, M.A.R., Zhang, Y., Zhang, J., Cheng, X., Chen, L., Scott, A.D., Harris, A.R., Gonzales, R.A. and May, G.D.

ESTS from Darnel ryegrass, Lollum temulentum L., Floral meristem Contact: May GD

Plant Biology Division

The Samuel Roberts Noble Foundation

The Samuel Roberts Noble Foundation

2510 Sam Noble Parkway, Ardmore, OK 73402, USA

Tel: 580 224 6650

Fax: 580 224 6650

Email: gdmay@noble.org.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GSS 14-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, eudicotyledons, core eudicotyledons,
rosids, eurosids II, Brassicales, Brassicaceae, Brassica.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ryegrass, Lodium temulentum L. were isolated from greenhouse plants four days after long-day treatment. The plants were initially grown at short-day conditions for six weeks before the long day treatment, mRNAs were isolated from floral meristems and used for CDNA library construction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA linear GSS 14-DEC-2
genomic clone BOGOG92, genomic
         813dLT65C12FW099_50552 Darnel ryegrass, Lolium temulentum L.,
Floral meristem Lolium temulentum cDNA, mRNA sequence.
DF673917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="Vector: Lambda Zap; Floral meristems of Darnel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 679)
Ayele, M., Haas, B.J., Kumar, N., Wu, H., Xiao, Y., Van Aken, S., Utterback, T.R., Wortman, J.R., White, O.R. and Town, C.D. Whole genome shotgun sequencing of Brassica oleracea and its application to gene discovery and annotation in Arabidopsis Genome Res. 15 (4), 487-495 (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 20; DB 10; Length 640;
Pred. No. 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TIGR
9712 Medical Center Drive, Rockville, MD 20850, USA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Lolium temulentum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.3%; Scc...
100.0%; Pred. No. 2c.,
'... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      679 bp
BOCOGGSTFF BOCO Brassica oleracea
Survey sequence.
BH557567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
/db_xref="taxon:34176"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        399 TTTTTGAGTTCTTCAACAGA 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITITGAGITCITCAACAGA 283
                                                                          DT673917.1 GI:74338096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BH557567.1 GI:17809347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     construction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Other_GSSs: BOGOG92TR
Contact: Chris Town
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 100.
108 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Brassica oleracea
Brassica oleracea
                                                                                                                     Lolium temulentum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15805490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
         DEFINITION
                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
BH557567/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PUBMED
COMMENT
                                                   ACCESSION
                                                                     VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
/note="Vector: pCMVSport6.1 (Invitrogen); Site 1: Not1; Site 2: Smal; Arrayed normalized library of full-length cDNAs representing blastula stage transcriptome of the sea urchin Strongylocentrotus purpuratus, cloned into the vector pCMVSport6.1 (Invitrogen)"
                                                                                                                                                                                                                                                                                                                                                                  626 bp mRNA linear EST 19-JAN-2005 yde22f05.y2 Sea urchin EST Libl Strongylocentrotus purpuratus cDNA clone yde22f05 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone lib="Sea urchin EST Lib1"
/note="Vector: pCMVSport6.1 (Invitrogen); Site 1: Not1;
Site 2: Smal; Arrayed normalized library of full-length
cDNAs representing blastula stage transcriptome of the sea
urchin Strongylocentrotus purpuratus, cloned into the
vector pCMVSport6.1 (Invitrogen)"
                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST 09-SEP-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 626)
Coffman, J.A., Robertson, A.J., Clifton, S., Pape, D., Hillier, L.,
Martin, J., Wylle, T., Dante, M., Meyer, R., Theising, B., Bowers, Y.,
Gibbons, M., Ronko, I., Tsagareishvill, R., Ritter, E., Kennedy, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: est@watson.wustl.edu
DNA sequencing by: Washington University Genome Sequencing Center
Seq primer: -28RPpOT
High quality sequence stop: 626.
Location/Qualifiers
                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Strongylocentrotus purpuratus
Bukaryota, Metazoa, Echinodermata, Eleutherozoa, Echinozoa,
Bchinoidea, Eucehinoidea, Echinoea, Echinoidea, Etrongylocentrotidae, Strongylocentrotidae,
                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wilson, R. Washu Sea Urchin EST Project
Washu Sea Urchin EST Project
Unpublished (2004)
Contact: Dr. James A. Coffman
Washu Sea urchin EST Project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Fax: 314 286 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                    4.3%; Score 20; DB 9; Length 613; 100.0%; Pred. No. 26; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 626;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .626
. Organism="Strongylocentrotus purpuratus"
/mol_type="mRNA"
/db_xref="taxon:7668"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 9;
26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.3%; Scc...
100.0%; Pred. No. 2c.,
... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     640 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Strongylocentrotus purpuratus
                                                                                                                                                                                                                                          101 ACGTTGACTGAGCGAGAATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="yde22f05"
/lab host="DH108"
                                                                                                                                                                                                                                                                        502 ACGTTGACTGAGCGAGAATT 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101 ACGITGACTGAGCGAGATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CX688942.1 GI:57950601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       478 ACGTTGACTGAGCGAGAATT
                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DT673917
                                                                                                                                                                                             20;
                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 11
DT673917/c
LOCUS
                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                  RESULT 10
                                                                                                                                                                                                                                                                                                                                                                         CX688942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

δ

```
Schistosoma japonicum
Schistosoma japonicum
Schistosoma japonicum
Schistosoma japonicum
Schistosoma japonicum
Schistosoma japonicum
Schistosomatoides; Trematoda; Digenea;
Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;
Strigeidida; Schistosomatoidea; Schistosoma.

CE (bases 1 to 896)
I (bases 1 to 896)
Wang, Z. J., Rong, Y. P., Zeng, L. C., Wu, J., Zhang, X., Wang, Z. Y., McManus, D. P., Xue, C. L., Feng, Z., Chen, Z. and Han, Z.G.

Rvolutionary and biomedical implications of a Schistosoma japonicum complementary DNA resource

NA Nat. Genet. 35 (2), 139-147 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BB212456 EXEN full-length enriched, 0 day neonate thymus Mus musculus cDNA clone A430110009 3', mRNA sequence.
BB212456
                                                                                                                                                                                                                                                                                                                                                                                                            SUFEDUADI SJF Schistosoma japonicum cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus
Mus musculus
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Zeguang Han
Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudong, Shanghai
201203, P. R. China
Tel: 86-21-50801919(ex.45)
Pax: 86-21-50801922
/note="Vector: pTARBAC1.3; Site 1: Mbo1; Site 2: Mbo1; CHORI-230 Rat (BN/SSNHsd/MCW) BAC library produced by Pieter de Jong"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gape
                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 896;
                                                                                                                                       Length 785;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .896
/organism="Schistosoma japonicum"
/organism="Rab"
/db xref="taxon:6182"
/sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.3%; Score 20; DB 3;
100.0%; Pred. No. 26;
                                                                                                                                         Score 20; DB 11;
Pred. No. 26;
                                                                                                                                 4.3%; Scor.
100.0%; Pred. No. 20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Pred. .v..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="Whole body"
/dev stage="adult"
/lab_host="rabbits"
/clone_lib="SJF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: hanzg@chgc.sh.cn.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          104 AAAATAAATGGAACACACAT 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 AAAATAAATGGAACACACAT 22
                                                                                                                                                                                                                                                                                         206 GGTTCAGGAGGCAGGGCAG 187
                                                                                                                                                                                                                                                    67 GGTTCAGGAGGCAGGCAG 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BB212456.1 GI:8877409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BU795670.1 GI:28352677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cuery Match
Best Local Similarity 100.0
Warches 20, Conservative
                                                                                                                                                                      Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                          Ouery Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
BB212456/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                      Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 14
BU795670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus (Norway rat)

Rattus norvegicus (Norway rat)

Rattus norvegicus (Andata, Craniata, Vertebrata, Euteleostomi, Eukaryota; Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Sciurognathi, Eutheria, Euanchontoglires, Glires, Rodentia, Sciurognathi, Muroidea, Murinae, Rattus.

1. (Dases I to 785)

1. (Abacea, Lo. 786)

2. (Abacea, Lo. 786)

3. (Abacea, Lo. 786)

3. (Abacea, Lo. 786)

3. (Abacea, Lo. 786)

3. (Abacea, Lo. 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Figure 1 szhaogtigr.org
Clones are derived from the rat BAC library CHORI-230
(http://www.chori.org/bacpac/rat230.htm). For BAC library
(http://www.chori.org/bacpac/rat230.htm). For BAC library
availability, please contact Pieter de Jong (pdejong@mail.cho.org).
Clones may be purchased from BACPAC Resources
(http://www.chori.org/bacpac/or ering information.htm). BAC end
page: http://www.tigr.org/tdb/bac_ends/rat/bac_end_intro.html
Plate: 276 row: O column: 24
Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BZ162280

CH230-276024.TV CHORI-230 Segment 2 Rattus norvegicus genomic clone CH230-276024, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                            /.organism="Brassica oleracea"
/mol type="genomic DNA"
|strain="TOL000B13"
|clone="BOGOG92"
|clone="be-goog02"
|clone="vector: pHOS1; Site_1: BstXI; 2-3 kb sheared
|/note="vector: pHOS1; Site_1: BstXI; 2-3 kb sheared
|/note="vector: pHOS1; Site_1 | BstXI | Inkers"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                              Tel: 301-838-3523
Fax: 301-838-0208
Email: cdtown@tigr.org
Email: cdtown@tigr.org
Seq primer: TF
Class: sheared ends.
Location(Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.3%; Score 20; DB 11; Length 679;
100.0%; Pred. No. 26;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /cell_type="Brain"
/clone_lib="CHORI-230 Segment 2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
1. 785
/organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="genomic DNA'
/strain="BN/SSNHsd/MCW'
/db_xref="taxon:10116"
/clone="CH230-276024"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BZ162280.1 GI:23803252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'вех="Fешаle"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 4.3
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                           1. .679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13
BZ162280/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                             FEATURES
```

ઠે 셤

```
SCHENGER IN MINISTER IN MINISTER WITCHER WITTER WITH MERCANDER IN MINISTER WITCH.

MUTHOR STATES AND MINISTER WITCHER WITTER WITCH.

MINISTER TO 1310 MARINA'S. DANYDRA'S. TARRAYA'S. THOUNA'S. CANDER MINISTER WITCH.

ICAMADA, "MARGANAMA," MARGANAMA," MARGANAMA, MARGANAMA,
```

4.1%; Score 19; DB 7; Length 230; 100.0%; Pred. No. 90;

Query Match Best Local Similarity

Search completed: November 4, 2006, 01:08:56 Job time : 2064.56 secs

The Page Blank (uspio)

54, Appl 5989, Ap 37781, 162781, 171938, 245466, 3617, Ap 299723, 11817, A 11817, A 191891, 255754, A 25754, A

Sequence

Sequence Seq

US-10-539-228-54
US-11-073-360-5889
US-11-266-748A-1162781
US-11-266-748A-11938
US-11-266-748A-11938
US-11-266-748A-11938
US-11-266-748A-11817
US-11-266-748A-19891
US-11-266-748A-19891
US-11-266-748A-19891
US-11-266-748A-19891
US-11-266-748A-19891
US-11-266-748A-19801
US-11-266-748A-198061

311489, 348672, 432051, 198066, 205770, 286159,

Sequence

ALIGNMENTS

```
Published Applications NA New:*

1: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US09 NEW PUB.seq:*
2: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US06 NEW PUB.seq:*
3: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US07 NEW PUB.seq:*
4: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US08 NEW PUB.seq:*
5: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US16 NEW PUB.seq:*
6: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US16 NEW PUB.seq:*
7: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US11 NEW PUB.seq:*
8: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US11 NEW PUB.seq:*
9: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US11 NEW PUB.seq:*
10: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US11 NEW PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5, Appli
Sequence 10, Appli
Sequence 72463, A
Sequence 61868, A
Sequence 1167, Ap
Sequence 1167, Ap
Sequence 11954,
Sequence 291826,
Sequence 291826,
Sequence 291826,
                                                                                                                                                November 3, 2006, 21:32:07; Search time 97.5198 Seconds (without alignments) 9311.708 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                1 tgaaaataaatggaacacac......tggatgattgcaggagattt
                   GenCore version 5.1.9
Copyright (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4922276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-764-316-5
US-10-764-316-3
US-11-36-524-10
US-11-056-355B-72462
US-11-056-355B-72470
US-11-266-748A-61868
US-11-266-748A-119954
US-11-266-748A-119954
US-11-266-748A-119954
US-11-266-748A-119954
US-11-266-748A-3124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                2461376 segs, 970166171 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                           - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                          OLIGO_NUC
Gapop_60.0 , Gapext 60.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                               US-10-764-316-5
468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94468
44649
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Word size :
                                                                                                         OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database :
                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                       Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       υ
```

Sequence 390944, Sequence 31124, A Sequence 91124, A Sequence 13626, A Sequence 28210, A Sequence 796, App Sequence 715, App Sequence 715, App Sequence 338, App

Sequence

Sequence 3 Sequence 4 Sequence 4

g δ 셤

ઠ

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 362 AATCGGGGCGTGGATTCAGGAGCAATTGTAAATAGTGTTTTTGAGTTCTTCAACAGACAA 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  242 ATTGTTTCAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCCAACTGTTGTATCA 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122 AGCACTCCTGGTATTCCGGATGAATGAGTATATCTGGAATACCGGAACCAATAGTCGCCCA 181
                                                                                                                 361 GAATCGGGGGCTGGATTCAGGAGCAATTGTAATAGTGTTTTTGAGTCTTTTGAGACAA 420
gaarcogogogropiticaggagcaarteraaaragrorititgagriciticaacagaca 420
                                                                                                                                                                                                                                                                                            RESULT 2
US-10-764-316-3
US-10-764-316-3
US-10-764-316-3
US-10-764-316-3
US-10-764-316-3
US-10-764-316-3
US-10-764-316-3
US-10-764-316
US-10-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           182 CAGGAGITGITIATATATITCTCACGIGTIGATGCATICGCTAACAGAGIAAAICITGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           crangarichadaagacaaragaachagrachachachachachachachaniri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 gapantanaridgan cacacarcarcracarcractrarracaganagragic refrigativic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1439 ACGGATCCTATAAGACAGCCGCTAACTGGATGATTGCAGAGATT 1485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     422 ACGGATCCTATAAGACACGCCGCTAACTGGATGGATTGCAGGAGATTT 468
                                                                                                                                                                             421 AACGGATCCTATAAGACAGGCGGCTAACTGGATGATTGCAGGAGTTT 468
                                                                                                                                                                                                            Length 2305;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 99.8%; Score 467; DB 6; Length 23 Best Local Similarity 100.0%; Pred. No. 1.8e-253; Matches 467; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
US-11-136-524-10
; Sequence 10, Application US/11136524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Escherichia coli
US-10-764-316-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ENGTH: 2305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                           301
                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
```

셤

g ઠ 임 8

ઠે

```
US-11-056-155B-72462/C
US-11-056-155B-72462/Application US/11056355B
; Sequence 72462, Application US/11056355B
; Sequence 72462, Application US/11056355B
; Sequence 72462, Application US US-11-056
; GENERAL INFORMATION:
; APPLICANT: BACAVET, Vyacheslav
; APPLICANT: Alexandrav, Nickolai
; TITLE OF INVENTION: Sequence Determined DNA Fragments and Corresponding
; TITLE OF INVENTION: Polypeptides Encoded Thereby
; TITLE OF INVENTION: Polypeptides Encoded Thereby
; TITLE OF INVENTION: VOLYPEPTIONS;
; CURRENT FILING DATE: 2005-02-14
; PRIOR APPLICATION NUMBER: 60/544,190
; PRIOR PILING DATE: 2004-02-13
; NUMBER OF SEG ID NOS: 119966
; SEQ ID NO 72462
; LENGTH: 1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   289 AACTGTTGTATCACGACCGATCATCGCCATTAGAATTGGTAATGATGTTTTTCTTCTCAAC 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 349 ccardcarregccaarregcgcgcgrearreagagcaarreagagcarregra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       229 AGTAAATÇTTGCGAATTGTTTCAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                            169 CAATAGTCGCCCACAGGAGTTGTTTATATTTTCTCACGTGTTGATGCATTCGCTAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 19; DB 9; Length 1458;
                                                                                                                                                                                                                                                                                                                                                  Length 412;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
| NAME/KEY: misc_feature
| LOCATION: (1).-(1458)
| OTHER INFORMATION: Ortholog of Ceres SEQ ID NO 13574398
| OTHER INFORMATION: as cited in SEQ ID NO 0
| US-11-056-3558-72462
                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                       Query Match
64.1%; Score 300; DB 8; L4
Best Local Similarity 100.0%; Pred. No. 4.3e-159;
Matches 300; Conservative 0; Mismatches 0;
publication No. US20060094034A1
GENERAL INPORMATION:
APPLICANT: BROUSSEAU, Roland
APPLICANT: BROUSSEAU, Roland
APPLICANT: BEKAL, Josee
APPLICANT: BEKAL, Sadjia
TITLE OF INVENTION: ARRAY AND USES THEREOF
TITLE OF INVENTION: ARRAY AND USES THEREOF
TURRENT APPLICATION NUMBER: US/11/136,524
CURRENT FILING DATE: 2005-05-25
NUMBER OF SEQ ID NOS: 182
SOFTWARE: Patentin version 3.2
SOFTWARE: Patentin version 3.2
ILBNGTH: 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc feature
LOCATION: (1). (1458)
OTHER INFORMATION: Ceres Seq. ID no.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Arabidopsis thaliana
                                                                                                                                                                                                                                                                                   TYPE: DNA
CRGANISM: Escherichia coli
US-11-136-524-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
```

```
US-11-266-748A-61868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                       ô
                                                                                                                                                                                                                                                                                                      Sequence 72470, Application US/11056355B

Publication No. US20060150283A1

GENERAL INFORMATION:
APPLICANT: Blexandrov, Nickolai

TITLE OF INVENTION: Sequence Determined DNA Fragments and Corresponding
TITLE OF INVENTION: Sequence Determined DNA Fragments and Corresponding
TITLE OF INVENTION: Polypeptides Encoded Thereby
FILE REFERENCE: 2750-1590FUS2

CURRENT APPLICATION NUMBER: US/11/056,355B

CURRENT APPLICATION NUMBER: 60/544,190

PRIOR FILING DATE: 2004-02-13

NUMBER OF SEQ ID NOS: 119966

SEQ ID NO 72470

LENGTH: 1461
                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 61868, Application US/11266748A

Publication No. US20060134663A1

GENERAL INFORMATION:

APPLICANT: Harkin, Paul

APPLICANT: Harkin, Paul

APPLICANT: Johnston, Patrick

APPLICANT: Johnston, Patrick

TITLE OF INVENTION: Methods of Using the Same

FILING DATE: 2004-11-03

PRIOR APPLICATION NUMBER: EP 04105482.6

PRIOR PRILING DATE: 2004-11-03

PRIOR PRILING DATE: 2004-11-03

PRIOR PRILING DATE: 2004-11-03

PRIOR PILING DATE: 2004-11-03

PRIOR PRILING DATE: 2004-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1461;
                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; LOCATION: (1). [(1461)]; OTHER INFORMATION: OTHER INFORMATION: as cited in SEQ ID NO 13574398; OTHER INFORMATION: as cited in SEQ ID NO 0 US-11-056-3558-72470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
4.1%; Score 19; DB 9;
Best Local Similarity 100.0%; Pred. No. 3.5;
Matches 19; Conservative 0; Mismatches
   100.0%; Pred. No. 3.5; tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc feature
LOCATION: (1).7(1461)
OTHER INFORMATION: Ceres Seq. ID no. 4935571
PRATURE: misc feature
LOCATION: (1).7(1461)
                                                                                                                                      1281 TTGTTTCAACAGAAGAGC 1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1284 TTGTTTCAAACAGAAGAGC 1266
                                                                                           243 TTGTTTCAAACAGAAGAGC 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    243 TTGTTTCAAACAGAAGAGC 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Arabidopsis thaliana
Best Local Similarity 100. Matches 19; Conservative
                                                                                                                                                                                                                                              RESULT 5
US-11-056-355B-72470/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 6
US-11-266-748A-61868/C
                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
```

```
Sequence 3167, Application US/10953349

Publication No. US20060107345A1

GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION: SEQUENCE-DETERNINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES

TITLE OF INVENTION: ENCONDED THERBY

FILE REFRENCE: 2700-15799US2

CURRENT PELLION UNMBER: US/10/953,349

CURRENT PILLING DATE: 2004-09-30

NUMBER OF SEQ ID NOS: 40252

SEQ ID NO 3167

LENGTH: 691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.8%; Score 18; DB 8; Length 575;
100.0%; Pred. No. 12;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 691;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.8%; Score 18; DB 6;
100.0%; Pred. No. 12;
PRIOR APPLICATION NUMBER: US 60/700,293
PRIOR FILING DATE: 2005-07-18
NUMBER OF SEQ ID NOS: 483996
SOFTWARE: Patentin version 3.3
SEQ ID NO 61868
LENGTH: 575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc feature
LOCATION: (569)...(569)
OTHER INFORMATION: n is a, c, g, or t
                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                        or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                             ģ
                                                                                                                                                                                                                                                                                                                                                                                           Ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    331 TGATGTTTTCTTCAAC 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90 rgargriricirchac 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-10-953-349-3167
                                                                                                                                                                             NAME/KEY: misc feature
LOCATION: (438)..(438)
OTHER INFORMATION: n is a, c,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc feature
LOCATION: (476)...(476)
OTHER INFORMATION: n is a,
                                                                                                                                                                                                                                                               NAME/KEY: misc feature
LOCATION: (441)..(441)
OTHER INFORMATION: n is a,
                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc feature
LOCATION: (462)...(462)
OTHER INFORMATION: n is a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc feature
LOCATION: (565)..(565)
OTHER INFORMATION: n is a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 100.
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc feature
LOCATION: (551)..(551)
OTHER INFORMATION: n is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc feature
LOCATION: (558)..(558)
OTHER INFORMATION: n is
                                                                                                                           TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-953-349-3167/c
```

Gape

ö

ઠ 셤

```
APPLICANT: Harkin, Fault
APPLICANT: Johnston, Patrick
APPLICANT: Johnston, Patrick
APPLICANT: Johnston, Farl
TITLE OF INVENTION: Transcriptome Microarray Technology and
TITLE OF INVENTION: Methods of Using the Same
FILE REPERSURS: 55815-0102 (131918)
CURRENT APPLICATION NUMBER: US/11/266,748A
CURRENT PILING DATE: 2005-11-03
PRIOR PELICATION NUMBER: EP 04105479.2
PRIOR PELICATION NUMBER: EP 04105483.4
PRIOR PELICATION NUMBER: EP 04105483.4
PRIOR PELICATION NUMBER: EP 04105483.9
PRIOR PELICATION NUMBER: EP 04105507.0
PRIOR PELICATION NUMBER: EP 04105484.2
PRIOR PELICATION NUMBER: EP 04105484.2
PRIOR PELICATION NUMBER: EP 04105484.2
PRIOR PELICATION NUMBER: US 0662,276
PRIOR PELICATION NUMBER: US 06700,293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 3.8%; Score 18; DB 8; Length 1000; Best Local Similarity 100.0%; Pred. No. 13; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
3.8%; Score 18; DB 8;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 18; Conservative 0; Mismatches
PRIOR FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105485.9
PRIOR APPLICATION NUMBER: EP 04105484.2
PRIOR FILING DATE: 2004-11-03
PRIOR FILING DATE: 2004-11-03
PRIOR FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: US 60/662,276
PRIOR PILING DATE: 2005-03-14
PRIOR FILING DATE: 2005-07-18
NUMBER OF FILING DATE: 2005-07-18
NUMBER OF SEQ ID NOS: 483996
SOFTWARE: PATENTIN VERSION 3.3
SEQ ID NO 119954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-11-266-748A-195502

Sequence 195502, Application US/11266748A

Publication No. US2060134663A1

GENERAL INFORMATION:

APPLICANT: Harkin, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        327 GTAATGATGTTTTCTTCT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          131 Grádredrerrrerrer 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    327 GTAATGATGTTTTCTTCT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 483996
SOFTWARE: Patentin version 3.3
SEQ ID NO 195502
LENGTH: 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Homo Sapiene
US-11-266-748A-195502
                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
CRGANISM: Homo Sapiens
US-11-266-748A-119954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                       ô
                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-11-20-/484-119954/C

j Sequence 119954, Application US/11266748A

j Publication No. US20060134663A1

GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: HALLIN, Paul

APPLICANT: Milligan, Karl

TILLE OF INVENTION: Transcriptome Microarray Technology and

TILLE OF INVENTION: Methods of Using the Same

TILLE REFERENCE: 55815-0102 (319189)

CURRENT APPLICATION NUMBER: US/11/266,748A

CURRENT FILING DATE: 2005-11-03

PRIOR APPLICATION NUMBER: EP 04105479.2

PRIOR APPLICATION NUMBER: EP 04105482.6

PRIOR APPLICATION NUMBER: EP 04105483.4

PRIOR APPLICATION NUMBER: EP 04105483.4

PRIOR PRILING DATE: 2004-11-03

PRIOR PILING DATE: 2004-11-03
                                                                                                                                                                                                                                                             RESULT 8

US-11-266-748A-114823

US-11-266-748A-114823

Sequence 114823, Application US/11266748A

Publication No. US20060134663A1

GENERAL INFORMATION:

APPLICANT: Horkwarion.

APPLICANT: Hould Neul

APPLICANT: Mulligan, Karl

TITLE OF INVENTION: Methods of Using the Same

TITLE OF INVENTION: Methods of Using the Same

TITLE OF INVENTION: Methods of Using the Same

FILE REFERENCE: 55615-0102 (312189)

FILE REFERENCE: 55615-0102 (312189)

CURRENT FILING DATE: 2004-11-03

PRIOR FILING DATE: 2004-11-03

PRIOR FILING DATE: 2004-11-03

PRIOR PELING DATE: 2004-11-03

PRIOR FILING DATE: 2004-11-03

PRIOR PELING DATE: 2005-07-18

PRIOR PERIOR PELING DATE: 2005-07-18

PRIOR PELING DATE: 2005-07-18
                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
3.8%; Score 18; DB 8; Length 1000;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 18; Conservative 0; Mismatches 0; Indels
                       Indela
                              ö
                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         327 GTAATGATGTTTTCTTCT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              190 GTTTATATATTCTCACG 207
                                                                                                                                 689 GTTTATATATTTCTCACG 672
                                     18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
CORGANISM: Homo Sapiens
US-11-266-748A-114823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 9
US-11-266-748A-119954/c
                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
```

ö

Gaps

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 390944, Application US/11266748A

Publication No. US20060134663A1

GENERAL INFORMATION:

APPLICANT: Harkin, Paul

APPLICANT: Horin, Paul

APPLICANT: Horin, Paul

APPLICANT: Mulligan, Karl

TITLE OF INVENTION: Transcriptome Microarray Technology and

TITLE OF INVENTION: WINBER: US/11/266,748A

CURRENT FILING DATE: 2006-11-03

FRIOR FILING DATE: 2004-11-03

FRIOR FILING DATE: 2004-11-03

FRIOR PELICATION NUMBER: EP 04105482.6

FRIOR FILING DATE: 2004-11-03

FRIOR APPLICATION NUMBER: EP 04105485.9

FRIOR FILING DATE: 2004-11-03

FRIOR PELING DATE: 2004-11-03

FRIOR FILING DATE: 2004-11-03

FRIOR FILING DATE: 2004-11-03

FRIOR FILING DATE: 2004-11-03

FRIOR FILING DATE: 2005-01-18

FRIOR APPLICATION NUMBER: US 60/662,276

FRIOR APPLICATION NUMBER: US 60/700,293

FRIOR FILING DATE: 2005-07-18

FRIOR APPLICATION NUMBER: US 60/700,293

FRIOR APPLICATION NUMBER: US 60/700,293

FRIOR APPLICATION NUMBER: US 60/700,293

FRIOR FILING DATE: 2005-07-18

FRIOR APPLICATION NUMBER: US 60/700,293

FRIOR FILING DATE: 2005-07-18

FRIOR APPLICATION NUMBER: US 60/700,293

FRIOR FILING DATE: 2005-07-18

FRIOR FILING DATE: 2005-07-18
                                                                                                                                                                                                                                                                                                                                                    Score 18; DB 8; Length 1000;
Pred. No. 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 3.8%; Score 18; DB 8; Length 1000; Best Local Similarity 100.0%; Pred. No. 13; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 481662, Application US/11266748A
PUBLICATION NO. US20060134663A1
GENERAL INFORMATION:
APPLICANT: Harkin, Paul
APPLICANT: Johnston, Patrick
APPLICANT: Mulligan, Karl
TITLE OF INVENTION: Transcriptome Microarray Technology and
                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                Query Match 3.8%; Sco
Best Local Similarity 100.0%; Pr
Matches 18; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          327 GTAATGATGTTTTCTTCT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   131 Grandardrirrrcrrcr 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        327 GTAATGATGTTTTCTTCT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 870 GTAATGATGTTTTTCTTCT 887
                                    NUMBER OF SEQ ID NOS: 483996
SOFTWARE: Patentin version 3.3
SEQ ID NO 308466
LENGTH: 1000
PRIOR FILING DATE: 2005-07-18
                                                                                                                                                                                          TYPE: DNA
CORGANISM: Homo Sapiens
US-11-266-748A-308466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: DNA
; ORGANISM: Homo Sapiens
US-11-266-748A-390944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-11-266-748A-481662/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-11-266-748A-390944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
            Sequence 281256, Application US/11266748A
Publication No. US20060134663A1
Publication No. US20060134663A1
Publication No. US20060134663A1
Publication No. US20060134663A1
APPLICANT: Harkin, Paul
APPLICANT: Harkin, Paul
APPLICANT: Mulligan, Kari
TITLE OF INVENTION: Methods of Using the Same
TITLE OF INVENTION: Methods of Using the Same
FILE REFERENCE: 55815-0102 (319189)
CURRENT APPLICATION NUMBER: BP 04105482.6
PRIOR APPLICATION NUMBER: BP 04105482.6
PRIOR APPLICATION NUMBER: BP 04105482.6
PRIOR PILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: BP 04105507.0
PRIOR PILING DATE: 2004-11-03
PRIOR PILING DATE: 2005-01-18
PRIOR PILING DATE: 2005-07-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JETI-11-126. 748A-308466, ABA-11-126. 748A-308466, ABA-11-126. 748A-308466, ABA-11-126. 748A-308466, ABA-11-126. 748A-308461. ABA-11-126. TO SEQUENCE JOHNSTON. ABA-11. APPLICANT: Harkin, Paul APPLICANT: Harkin, Paul APPLICANT: Mulligan, Karl TITLE OF INVENTION: Transcriptome Microarray Technology and TITLE OF INVENTION: Methods of Using the Same FILE REFERENCE: 55815-0102 (319189)

CURRENT APPLICATION NUMBER: US 11/266, 748A

CURRENT FILING DATE: 2004-11-03

FRIOR APPLICATION NUMBER: EP 04105482.6

PRIOR FILING DATE: 2004-11-03

FRIOR APPLICATION NUMBER: EP 04105507.0

FRIOR PILING DATE: 2004-11-03

FRIOR APPLICATION NUMBER: EP 04105485.9

FRIOR PILING DATE: 2004-11-03

FRIOR APPLICATION NUMBER: EP 04105486.2

FRIOR APPLICATION NUMBER: EP 04105486.3

FRIOR APPLICATION NUMBER: US 06/662,276

FRIOR APPLICATION NUMBER: US 06/662,276

FRIOR APPLICATION NUMBER: US 06/700,293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 8; Length 1000; 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 3.8%; Score 18; DB Best Local Similarity 100.0%; Pred. No. 13; Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          327 GTAATGATGTTTTCTTCT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       870 Grandardrirrirrir 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: DNA
; ORGANISM: Homo Sapiens
US-11-266-748A-281826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-11-266-748A-308466/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

ö

Gaps

Gaps

ö

```
Query Match 3.8%; Score 18; DB 8; Length 1037; Best Local Similarity 100.0%; Pred. No. 13; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                 Search completed: November 4, 2006, 01:19:20 Job time : 99.5198 secs
                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15

US-11-266-748A-93124

US-11-266-748A-93124

Sequence 93124, Application US/11266748A

Publication No. US20060134663AI

Sequence 9124, Application US/11266748A

Publication No. US20060134663AI

APPLICANT: Harkin, Paul

APPLICANT: Mulligan, Karl

TITLE OF INVENTION: Transcriptome Microarray Technology and
TITLE OF INVENTION: Methods of Using the Same
FILE REFERENCE: 55815-0102 (19189)

CURRENT APPLICATION: MUMBER: US/11/266,748A

CURRENT APPLICATION NUMBER: EP 04105479.2

PRIOR PILING DATE: 2004-11-03

PRIOR FILING DATE: 2004-11-03

PRIOR FILING DATE: 2004-11-03

PRIOR PLICATION NUMBER: EP 04105483.4

PRIOR PLICATION NUMBER: EP 04105483.9

PRIOR PLICATION NUMBER: EP 04105485.9

PRIOR PLICATION NUMBER: EP 04105485.9

PRIOR FILING DATE: 2004-11-03

PRIOR PLICATION NUMBER: US 60/662,276

PRIOR PLICATION NUMBER: US 60/662,276

PRIOR PLICATION NUMBER: US 60/662,276

PRIOR PLICATION NUMBER: US 60/700,293

PRIOR PLICATION NUMBER: US 60/70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0%; Pred. No. 13;
Matches 18; Conservative 0; Mismatches 0; Indels
TITLE OF INVENTION: Methods of Using the Same FILE REFERENCE: 55815-0102 (319189)
CURRENT APPLICATION NUMBER: US/11/266,748A
CURRENT FILING DATE: 2005-11-03
PRIOR FILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105485.9
PRIOR APPLICATION NUMBER: EP 04105485.9
PRIOR FILING DATE: 2004-11-03
PRIOR FILING DATE: 2004-11-03
PRIOR FILING DATE: 2004-11-03
PRIOR PILING DATE: 2004-11-03
PRIOR PILING DATE: 2004-11-03
PRIOR APPLICATION NUMBER: EP 04105484.2
PRIOR APPLICATION NUMBER: US 60/662,276
PRIOR PILING DATE: 2005-01-14
PRIOR APPLICATION NUMBER: US 60/700,293
PRIOR APPLICATION NUMBER: US 60/700,293
PRIOR APPLICATION NUMBER: US 60/700,293
PRIOR PILING DATE: 2005-07-18
NUMBER OF SEQ ID NOS: 483996
SOFTWARE: PALENT VERSION 3.3
SEQ ID NO 481662
LENGTH: 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA
; ORGANISM: Homo Sapiens
US-11-266-748A-93124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , ORGANISM: Homo Sapiens
US-11-266-748A-481662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

н

Page

```
RESULT 1
US-09-328-352-597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Simi:
Matches 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 597, App
Sequence 617, App
Sequence 2907, Ap
Sequence 4352, Ap
Sequence 13503, Ap
Sequence 14769, A
Sequence 14760, A
Sequence 17595, A
Sequence 16191, A
Sequence 17595, A
Sequence 16191, A
                                                                                                                                                                                                        November 3, 2006, 21:28:41; Search time 122.65 Seconds (without alignments) 7139.630 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42564, P
140295,
140296,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13877,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42562,
42563,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14018,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Iseued Patents NA:*

1: /EMC_Celerra_SIDS3/ptodata/2/ina/1_COMB.seq:*
2: /EMC_Celerra_SIDS3/ptodata/2/ina/5_COMB.seq:*
3: /EMC_Celerra_SIDS3/ptodata/2/ina/6_COMB.seq:*
4: /EMC_Celerra_SIDS3/ptodata/2/ina/6_COMB.seq:*
5: /EMC_Celerra_SIDS3/ptodata/2/ina/7_COMB.seq:*
6: /EMC_Celerra_SIDS3/ptodata/2/ina/H_COMB.seq:*
7: /EMC_Celerra_SIDS3/ptodata/2/ina/PCOMB.seq:*
8: /EMC_Celerra_SIDS3/ptodata/2/ina/PCOMB.seq:*
9: /EMC_Celerra_SIDS3/ptodata/2/ina/RCOMB.seq:*
9: /EMC_Celerra_SIDS3/ptodata/2/ina/RCOMB.seq:*
10: /EMC_Celerra_SIDS3/ptodata/2/ina/RE_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                     1 tgaaaataaatggaacacac.......tggatgattgcaggagattt 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-328-352-597
US-09-134-001C-617
US-09-110-279-4352
US-09-710-279-4352
US-09-710-279-4382
US-09-949-016-13503
US-09-949-016-14768
US-09-949-016-14768
US-09-949-016-14768
US-09-949-016-14768
US-09-949-016-147995
US-09-949-016-14018
US-09-949-016-13877
US-09-949-016-13877
US-09-949-016-42562
US-09-949-016-42562
US-09-949-016-42563
US-09-949-016-42563
US-09-949-016-42563
US-09-949-016-42563
US-09-949-016-42563
US-09-949-016-42563
US-09-949-016-42563
US-09-949-016-42563
US-09-949-016-42563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1403666 segs, 935554401 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                                                                                                           nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OLIGO NUC
Gapop 60.0 , Gapext 60.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                   US-10-764-316-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1017
1356
1356
3069
3206
4249
34047
67581
67581
117838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193303
193303
202111
38
38
198
338
601
601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
601
601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Word size :
                                                                                                                'DM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Searched:
                                                                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ט ט
```

```
C 24 17 3.6 601 3 US-09-949-016-160535 Sequence 160534, 26 17 3.6 601 3 US-09-949-016-160535 Sequence 160535, 27 17 3.6 601 3 US-09-949-016-160535 Sequence 160535, 27 17 3.6 601 3 US-09-949-016-160535 Sequence 160535, 27 17 3.6 1184 3 US-09-249-016-160535 Sequence 2935, App 20 17 3.6 1184 3 US-09-28-111-609 Sequence 200, App 20 17 3.6 1184 3 US-09-28-113-75 Sequence 2015, App 20 17 3.6 1187 3 US-09-28-35-113 Sequence 1131, App 20 17 3.6 1186 3 US-09-38-35-113 Sequence 1131, App 20 17 3.6 1212 3 US-09-128-35-13 Sequence 1131, App 20 17 3.6 2212 3 US-09-11-254-24 Sequence 11, Appl 20 17 3.6 2237 2 US-08-14-917-1 Sequence 1, Appl 20 17 3.6 2237 2 US-08-14-917-1 Sequence 1, Appl 20 17 3.6 2237 2 US-08-14-917-1 Sequence 1, Appl 20 17 3.6 2237 2 US-09-14-917-1 Sequence 7191, App 20 17 3.6 2237 2 US-09-14-917-1 Sequence 7191, App 20 17 3.6 2237 2 US-09-14-917-1 Sequence 7191, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 668, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 7191, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 668, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3.6 2237 3 US-09-902-540-1891 Sequence 1511, App 20 17 3 US-09-902-540-1891 Sequence 1511, App 20 18 20 18 20 1
```

## ALIGNMENTS

```
Sequence 617, Application US/09134001C

Sequence 617, Application US/09134001C

Sequence 617, Application US/09134001C

GENERAL INFORMATION:

GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION: UNCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS

TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

CURRENT PELLOR UNUMBER: US 60/054,964

PRIOR FILING DATE: 1997-11-08

PRIOR FILING DATE: 1997-11-08

PRIOR FILING DATE: 1997-08-14

NUMBER FOR SEQ ID NOS: 5674

SEQ ID NO 617

LENGTH: 1356
Sequence 597, Application US/09328352
Patent No. 6562958
GENERAL INFORMATION:
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
TITLE OF INVENTION: BAUMANII FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERBNCE: GTC99-03PA
CURRENT APPLICATION NUMBER: US/09/328,352
CURRENT FILING DATE: 1999-06-04
NUMBER OF SEQ ID NOS: 8252
SEQ ID NO 597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                 DB 3; Length 1017; 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                 Score 18;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                               3.8%; Scor.
100.0%; Pre
                                                                                                                                                                                                                                                                                                          TYPE: DNA
; ORGANISM: Acinetobacter baumannii
US-09-328-352-597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            471 Carragaarragraarga 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATTAGAATTGGTAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
```

```
1482 GATGATTGCAGGAGATTT 1465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4352, Application US/09710279

Patent No. 6703492

GENERAL INFORMATION:
APPLICANT: KIMMERLY, WILLIAM JOHN
TITLE OF INVENTION: STARHYLOCCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
FILE REFERENCE: PU3480US
CURRENT APPLICATION NUMBER: US/09/710,279
CURRENT PILING DATE: 2000-11-09
PRIOR APPLICATION NUMBER: 60/164,258
PRIOR FILING DATE: 1999-11-09
NUMBER OF SEQ ID NOS: 4472
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                       Sequence 2907, Application US/09710279

Sequence 2907, Application US/09710279

Patent No. 6703492

GENERAL INFORMATION:

APPLICANT: KIMMERLY, WILLIAM JOHN

TITLE OF INVENTION:

FILE REFERENCE: PU348002

CURRENT APPLICATION NUMBER: US/09/710,279

CURRENT FILING DATE: 2000-11-09

PRIOR APPLICATION NUMBER: 60/164,258

PRIOR FILING DATE: 1999-11-09

NUMBER OF SEQ ID NOS: 4472

SOUTHWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTHER INFORMATION: Description of Artificial Sequence: synthetic; OTHER INFORMATION: nucleic acid sequence US-09-710-279-4352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTHER INFORMATION: Description of Artificial Sequence: synthetic; OTHER INFORMATION: nucleic acid sequence
US-09-710-279-2907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 3069;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 3; Length 1356;
22;
                                                                   Query Match
3.8%; Score 18; DB 3; Length 1356;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
3.8%; Score 18; DB 3;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 18; Conservative 0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.8%; Score 18; DB Best Local Similarity 100.0%; Pred. No. 22; Matches 18; Conservative 0; Mismatches
            , ORGANISM: Staphylococcus epidermidis
US-09-134-001C-617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  451 GATGATTGCAGGAGATTT 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    451 GATGATTGCAGGAGATTT 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 4
US-09-710-279-4352/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 4352
LENGTH: 3069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 2907
LENGTH: 1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                             셤
                                                                                                                                                              ઠ
```

ઠે

```
Sequence 4382, Application US/09710279

Sequence 4382, Application US/09710279

Patent No. 6703492

GENERAL INFORMATION:
TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS

TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS

CURRENT APPLICATION NUMBER: US/09/710,279

CURRENT APPLICATION NUMBER: US/09/710,279

CURRENT APPLICATION NUMBER: 06/164,258

PRIOR RILING DATE: 1999-11-09

NUMBER OF SEQ ID NOS: 4472

SEQ ID NO 4382

LENGTHA: 3206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: KIMMERLY, WILLIAM JOHN
APPLICANT: KIMMERLY, WILLIAM JOHN
TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
FILE REPERENCE: PU3480US
CURRENT APPLICATION NUMBER: US/09/710,279
CURRENT FILMS DATE: 2000-11-09
PRIOR APPLICATION NUMBER: 60/164,258
PRIOR FILING DATE: 1999-11-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTHER INFORMATION: Description of Artificial Sequence: synthetic; CTHER INFORMATION: nucleic acid sequence US-09-710-279-4133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                        of Artificial Sequence: synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 3.8%; Score 18; DB 3; Length 4249; Best Local Similarity 100.0%; Pred. No. 22; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 3; Length 3206;
22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
3.8%; Score 18; DB
Best Local Similarity 100.0%; Pred. No. 22;
Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Description of Artific; OTHER INFORMATION: nucleic acid sequence US-09-710-279-4382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-949-016-13503

; Sequence 13503, Application US/09949016

; Datent NO. 6812339

; GRERAL INFORMATION:

; APPLICANT: VENTER, J. Craig et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4133, Application US/09710279
Patent No. 6703492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4145 GALGALTGCAGGAGALTT 4128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000 GATGATTGCAGGAGATTT 2017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         451 GATGATTGCAGGAGATTT 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               451 GATGATTGCAGGAGATTT 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 4472
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 4133
LENGTH: 4249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 6
US-09-710-279-4133/c
RESULT 5
US-09-710-279-4382
```

```
NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-949-016-17595/c
                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-949-016-17595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 117838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTON: POLYNORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTON: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
FILE REPERENCE: CLOO1307
CURRENT APPLICATION NUMBER: 50/241,755
PRIOR PLING DATE: 2000-10-20
PRIOR PLING DATE: 2000-10-03
PRIOR PLING DATE: 2000-10-03
PRIOR PLING DATE: 2000-10-03
PRIOR PLING DATE: 2000-0-10-03
PRIOR PLING DATE: 2000-0-0-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FASESEQ FOR WINDOWS Version 4.0
SEQ ID NO 14768
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REPERENCE: CLOOL307
CURRENT APPLICATION NUMBER: US/09/949,016
FRIOR APPLICATION NUMBER: 60/241,755
PRIOR PELING DATE: 2000-10-10
PRIOR PILING DATE: 2000-10-30
PRIOR PILING DATE: 2000-10-00
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR PILING DATE: 2000-09-08
PRIOR PILING DATE: 2000-09-08
SOFTWARE: PASISEQ for Windows Version 4.0
SEQ ID NO 13503
LENGTH...34047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 3; Length 34047; 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 3, Length 67581;
22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 3.8%; Score 18; DB Best Local Similarity 100.0%; Pred. No. 22; Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.8%; Score 18; DB Best Local Similarity 100.0%; Pred. No. 22; Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 14768, Application US/09949016
Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 14760, Application US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20376 AATGATGTTTTCTTCTCA 20393
                                                                                                                                                                                                                                                                                                                                                                                                                                         ; LOCATION: (1)...(34047)
; OTHER INFORMATION: n = A,T,C or G
US-09-949-016-13503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCATION: (1)...(67581)
CTHER INFORMATION: n = A,T,C or G
US-09-949-016-14768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10604 GAATTGGTAATGATGTTT 10621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       329 AATGATGTTTTCTTCA 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               321 GAATTGGTAATGATGTTT 338
                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature
LOCATION: (1)...(34047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-949-016-14760
                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
```

```
Sequence 17939, Application US/09949016
; Sequence 17958, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VEXTER, J. Craig et al.
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-10-03
; PRIOR FILING DATE: 2000-00-16
; RIOR FILING DATE: 2000-00-16
; RIOR FILING DATE: 2000-00-16
; RIOR FILING DATE: 2000-00-16
; ROPTWARE: FastSEQ for Windows Version 4.0
; SQFTWARE: FastSEQ for Windows Version 4.0
FERGINAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
CURRENT APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR PILING DATE: 2000-10-03
PRIOR PILING DATE: 2000-10-03
PRIOR PILING DATE: 2000-10-03
PRIOR PILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
3.8%; Score 18; DB 3; Length 117838;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 18; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 3; Length 67643; 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
3.8%; Score 18; DB
Best Local Similarity 100.0%; Pred. No. 22;
Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10592 GAATTGGTAATGATGTTT 10609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; LOCATION: (1)...(67643)
; OTHER INFORMATION: n = A,T,C or G
US-09-949-016-14760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc feature
LOCATION: (1)...(117838)
OTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18984 AGTTCTTCAACAGACAAA 18967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   321 GAATTGGTAATGATGTTT 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          405 AGTTCTTCAACAGACAAA 422
```

```
TYPE: DNA
ORGANISM: Homo sapiens;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
US-09-371-772B-11741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                           US-09-497-855A-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
Sequence 16191. Application US/09949016

Sequence 16191. Application US/09949016

Sequence 16191. Application US/09949016

Patch No. 681239

GENERAL INFORMATION:

TITLE OF INVENTION:

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: C000-04-14

PRIOR APPLICATION NUMBER: 60/231,768

PRIOR PILING DATE: 2000-10-03

PRIOR APPLICATION NUMBER: 60/231,498

PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 37, Application US/09497855A

Sequence 37, Application US/09497855A

Patent No. 6605432

GENERAL INFORMATION:

APPLICATIVE HUANG, THE

TILE OF INVENTION: HIGH-THROUGHPUT METHODS FOR DETECTING DNA METHYLATION

FILE REFERENCE: UMO1523

CURRENT APPLICATION NUMBER: US/09/497,855A

CURRENT PILING DATE: 1999-02-04

PRIOR FILING DATE: 1999-02-05

PRIOR FILING DATE: 1999-02-05

NUMBER OF SEQ ID NOS: 54

SOFTWARE: PATENT OF SEQ ID NOS: 54

SEQ ID NO 37

LENGTH: 193303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 44, Application US/09497855A
; Patent No. 6605432
; GENERAL INFORMATION:
; APPLICANT: Hangy Tim
; TITLE OF INVENTION:
; FILE REFERENCE: UMO1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
3.8%; Score 18; DB 3; Length 193303;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 18; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
3.8%; Score 18; DB 3; Length 155617;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 18; Conservative 0; Mismatches 0; Indels 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               108176 AGGAGTTGTTTATATATT 108159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         331 TGATGTTTTCTTCAAC 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       183 AGGAGTTGTTTATATT 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo sapiens;
US-09-497-855A-37
US-09-949-016-16191/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-16191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
US-09-497-855A-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 12
US-09-497-855A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

```
Sequence 11741, Application US/09371772B
; Sequence 11741, Application US/09371772B
; Sequence 11741, Application US/09371772B
; Sequence 11741, Application:
; APPLICANT: Bloczyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: Rinchoom, Dan
; APPLICANT: Escobedo, Jaime
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions R.
; TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-99-016-13877

i Sequence 13877, Application US/09949016

j Sequence 13877, Application US/09949016

j Releant No. 6812339

j GENERAL INFORMATION:

APPLICANT: VENTER, J. Craig et al.

APPLICANT: VENTER, J. Craig et al.

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: C1001307

CURRENT APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08

NUMBER: OF SEQ ID NOS: 207012

SEQ ID NO 13877

LENGTH: 202111

TURED TO NO 13877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 202111,
                                                                                                                                                                                                                                                                                                                                                                                       Query Match 3.8%; Score 18; DB 3; Length 193303; Best Local Similarity 100.0%; Pred. No. 22; Matches 18; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
3.8%; Score 18; DB 3;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 18; Conservative 0; Mismatches
CURRENT APPLICATION NUMBER: US/09/497,855A
CURRENT FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: 60/120,592
PRIOR FILING DATE: 1999-02-18
PRIOR PILING DATE: 1999-02-05
NUMBER: OF SEQ ID NOS: 54
SEQ ID NO 44
LENGTARE: Patentin version 3.0
SEQ ID NO 44
LENGTHE: 193303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            74832 GAGTTGTTTATATATTT 74849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161051 rearcriritritricaac 161068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature

| LOCATION: (1)...(202111)

| OTHER INFORMATION: n = A,T,C or G

US-09-949-016-13877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            185 GAGTIGITIATATATIC 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    331 TGATGTTTTCTTCAAC 348
```

```
CURRENT APPLICATION NUMBER: US/09/371,772B

CURRENT PILIG DATE: 1999-08-10

PRIOR APPLICATION NUMBER: US 6/005,974

PRIOR APPLICATION NUMBER: US 6/005,974

PRIOR APPLICATION NUMBER: US 6/005,974

PRIOR PELING DATE: 1995-10-26

NUMBER OF SEQ ID NOS: 14225

SOFTWARE: Patentin version 3.0

SOFTWARE: Patentin version 3.0

SEQ ID NO 11741

LENGTH: 38

TYPE: RNA

ORGANISM: Artificial Sequence

PRATURE:

OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid

NAME/KEY: misc feature

COTHER INFORMATION: n stands for inosine

JOCHER INFORMATION: n stands for inosine

US-09-371-772B-11741

QUETY MATCH

Watches 15; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 253 CAGAAGACCTGATGAGG 269
```

Search completed: November 3, 2006, 23:46:17 Job time : 126.65 secs

1 CAGAAGAGCUGAUGAGG 17

q

(etash) kudid obod sti

Sequence 208515, Sequence 1103290, Sequence 29902, A Sequence 29906, A Sequence 29906, A Sequence 377, App Sequence 377, App Sequence 226608, Sequence 226608, Sequence 234160, Sequence 199207, Sequence 199207, Sequence 199207, Sequence 174541, Sequence 298848, Sequence 298848,

Sequence

OM nucleic

Run on:

```
AACTGTTGTATCACGACCGATCATCGGCATTAGAATTGGTAATGATGTTTTCTTCTCAAC 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAATAGTCGCCCCACAGGAGTTGTTTATATATTTCTCACGTGTTGATGCATTCGCTAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      169 CAATAGTCGCCCACAGGAGTTGTTTATATATTTCTCACGTGTTGATGCATTCGCTAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTAAATCTTGCGATTGTTTCAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCATGCATTGGCGAATCGGGGCGTGGATTCAGGAGCAATTGTAAATAGTGTTTTTGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCATGCATTGGCGAATCGGGGCGTGGATTCAGGAGCAATTGTAAATAGTGTTTTTGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 64.1%; Score 300; DB 9; Length 412; Best Local Similarity 100.0%; Pred. No. 7.3e-156; Matches 300; Conservative 0; Mismatches 0; Indels
        US-10-425-821-10
Sequence 10, Application US/10425821
Sequence 10, Application US/10425821
Sequence 10, Splication US/10425821
Sequence 10, US20040219530A1
GENERAL INFORMATION:
APPLICANT: BROUSSEAU, Roland
APPLICANT: BEKAL, Sadisa
TITLE OF INVENTION: ARRAY AND USES THEREOF
FILE REFERENCE: 86.569-3
CURRENT APPLICATION UNBER: US/10/425,821
CURRENT APPLICATION UNBER: US/10/425,821
CURRENT FILING DATE: 2003-04-30
NUMBER OF SEQ ID NOS: 176
SOFTWARE: PatentIn version 3.2
SOFTWARE: PatentIn version 3.2
LENGTH: 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Becherichia coli
US-10-425-821-10
229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                      Published Applications NA Main:*

1: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US07_PUBCOMB.seq:*
2: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US09_PUBCOMB.seq:*
3: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US09_PUBCOMB.seq:*
4: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US09_PUBCOMB.seq:*
5: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US09_PUBCOMB.seq:*
6: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US10A_PUBCOMB.seq:*
7: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
8: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
9: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
10: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
11: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
12: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
13: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
14: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US11B_PUBCOMB.seq:*
15: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US11B_PUBCOMB.seq:*
16: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US11B_PUBCOMB.seq:*
16: / EMC_Celerra_SIDS3/ptodata/2/pubpna/US11B_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 10, Appl
Sequence 426352,
Sequence 426352,
Sequence 489880,
Sequence 1103289,
Sequence 59271, A
Sequence 59271, A
Sequence 67269,
Sequence 672681,
Sequence 208513,
                                                                                   November 3, 2006, 21:27:32 ; Search time 634.59 Seconds (without alignments) 9061.940 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                       1 tgaaaataaatggaacacac........tggatgattgcaggagattt 468
                                                                                                                                                                                                                                                                                                37781012
        GenCore version 5.1.9
Copyright (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-425-821-10

US-10-425-821-10

US-09-925-065A-426352

US-09-925-065A-426352

US-10-301-480-489880

2 US-10-301-480-1103289

2 US-10-301-480-59271

2 US-10-301-480-59271

2 US-10-301-480-59271

2 US-10-301-480-672689

2 US-10-301-480-672689

2 US-10-301-480-672681

2 US-10-301-480-672681

2 US-10-301-480-672681

US-10-027-632-208514

US-10-027-632-208514

US-10-027-632-208514

US-10-027-632-208513

US-10-027-632-208513
                                                                                                                                                                                                                                        18892170 segs, 6143817638 residues
                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUMMARIES
                                                             - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Listing first 45 summaries
                                                                                                                                                                                               OLIGO NUC
Gapop_60.0 , Gapext 60.0
                                                                                                                                                                                                                                                                                                                         Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                         US-10-764-316-5
468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                               Scoring table:
```

Word size :

Searched:

Sequence:

Database :

288

0 0 0 0 0 0 0 0 0 0 0

Result

Gaps

ö

240

```
RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
409 CTTCAACAGACAAACGGATCCTATAAGACAGGCGGCTAACTGGATGATTGCAGGAGATTT 468
                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 3
US-09-925-065A-426352
US-09-925-065A-426352, Application US/09925065A

Sequence 426352, Application US/09925065A

Sequence 426352, Application US/09925065A

Publication No. US2040181048A1

GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION: Identification and Mapping of Single

TITLE OF INVENTION: Identification and Mapping of Single

TITLE OF INVENTION: NUCLOCIAGE POLYMORPHISMS in the Human Genome

TITLE OF INVENTION: NUCLOCIAGE POLYMORPHISMS in CURRENT FILING DATE: 2001-06-08

CURRENT FILING DATE: 2000-10-24

PRIOR FILING DATE: 2000-11-20

PRIOR PILING DATE: 2000-11-30

PRIOR PILING DATE: 2001-01-16

PRIOR PILING DATE: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 4.3%; Score 20; DB 9; Length 83710; Best Local Similarity 100.0%; Pred. No. 10; Momatches 0; Indels (Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.1%; Score 19; DB 4; Length 496; Best Local Similarity 100.0%; Pred. No. 27; Best Local Similarity 0, Mismatches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                             Sequence 27, Application US/10417375
; Sequence 27, Application US/2040219528A1
; Publication No. US20040219528A1
; GENERAL INFORMATION: Morris
APPLICANT: David W. Morris
; APPLICANT: Marc Malandro
; TITLE OF INVENTION: Novel Therapeutic Targets in Cancer; TITLE OF INVENTION: Novel Therapeutic Targets in Cancer; TITLE OF INVENTION NUMBER: US/10/417,375
CURRENT APPLICANTION NUMBER: US/2004-15
; CURRENT APPLICANTION NUMBER: US/2004-15
; NUMBER OF SEQ ID NOS: 176
; SEQ ID NO 27
; SEQ ID NO 27
; LENGTH: 83710
; LENGTH: 83710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     326 GGTAATGATGTTTTCTTCT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            158 GGIAATGATGTTTTCTTCT 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3171 Arriadcacicciddiairc 3152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          118 ATTTAGGACTCCTGGTATTC 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
LOCATION: (1)...(83710)
OTHER INFORMATION: n = A,T,C or G
US-10-417-375-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           , ORGANISM: Homo sapiens US-09-925-065A-426352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Mus musculus
                                                                                                                                                                                                                                  RESULT 2
US-10-417-375-27/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                        셤
                                                          ò
```

g

```
RESULT 5
US-10-301-480-489880
1 Sequence 489880, Application US/10301480
2 Sequence 489880, Application US/10301480
3 Sequence 489880, Application US/10301480
3 Publication No. US20060057564A1
3 CENERAL INFORMATION:
4 APPLICANT: Wang) David G.
5 TITLE OF INVENTION: 1n the Human Genome
5 TITLE OF INVENTION: 1n the Human Genome
6 TITLE PEPERBKUSE: 1082-1.13
6 CURRENT APPLICATION NUMBER: US/10/301,480
7 CURRENT PILING DATE: 2002-08-09
7 PRIOR APPLICATION NUMBER: US 60/311,695
7 PRIOR APPLICATION NUMBER: US 60/311,695
7 PRIOR PILING DATE: 2001-08-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
US-09-925-065A-426352
Sequence 426352, Application US/09925065A
Fublication No. US20050228172A9
Fublication No. US20050228172A9
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Molectide Polymorphisms in the Human Genome
TITLE OF INVENTION: Molectide Polymorphisms in the Human Genome
CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT FILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-30
PRIOR FILING DATE: 2000-11-30
PRIOR FILING DATE: 2001-11-30
PRIOR FILING DATE: 2001-01-16
PRIOR PRIOR FILING DATE: 2001-01-16
PRIOR PRIOR FILING DATE: 2001-01-16
PRIOR PRIOR PRIOR DATE: 2001-01-16
PRIOR PRIOR DATE: 2001-01-16
PRIOR PRIOR PRIOR DATE: 2001-01-16
PRIOR PRIOR PRIOR DATE: 2001-01-16
PRIOR PRIOR D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 4.1%; Score 19; DB 12; Length 497; Best Local Similarity 100.0%; Pred. No. 27; Best Local Similarity 0; Mismatches 0; Indels Matches 19; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 19; DB 5; Length 496; 100.0%; Pred. No. 27; tive 0; Mismatches 0; Indels tive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 1226818 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 489880 LENGTH: 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            326 GGTAATGATGTTTCTTCT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       158 ĠĠŦAĸŦĠĸŦĠŦĠŦŦŦŦĊŦŦĊŦ 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               158 GGTAATGATGTTTTCTTCT 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      326 GGTAATGATGTTTTCTTCT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.0
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapien
US-10-301-480-489880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens
US-09-925-065A-426352
```

Gaps

ö

0; Indels

```
Sequence 59272, Application Us/10301480

Publication No. US20060057564A1

Publication No. US20060057564A1

APPLICANT: Wang, David G.

TITLE OF INVENTION: In the Human Genome

FILE REFERENCE: 108027.137

CURRENT APPLICATION NUMBER: US/10/301,480

CURRENT APPLICATION NUMBER: US/10/301,480

CURRENT APPLICATION NUMBER: US 60/311,695

PRIOR FILING DATE: 2002-08-09

PRIOR FILING DATE: 2001-08-10

NUMBER OF SEQ ID NOS: 1226818

SOFTWARE: PRACES (or Windows Version 4.0)

LENGTH: 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 672679, Application US/10301480

Sequence 672679, Application US/10301480

Sequence 672679, Application US/10301480

Sequence 672679, Application US/060057564A1

Sequence 672679, Application US/060057564A1

Sequence 672679, Application US/060057564A1

TUTLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms

TITLE OF INVENTION: in the Human Genome

FILE REFERENCE: 108827.137

CURRENT APPLICATION NUMBER: US/10/301,480

CURRENT APPLICATION NUMBER: US 60/2115,598

PRIOR FILING DATE: 2002-10-09

PRIOR FILING DATE: 2002-08-09

PRIOR FILING DATE: 2001-08-10

NUMBER OF SEQ ID NOS: 1226818

SOFTWARE: FastSEQ for Windows Version 4.0

LENGTH: 506
                                                                                                                                                                                                                                                                                                                      DB 12; Length 506; 27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 12; Length 506;
27;
                                                                                                                                                                                                                                                                                                      4.1%; scc. 100.0%; Pred. No. ... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.0%; Pred. No. 27,
Matches 19; Conservative 0; Mismatches
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
PRIOR PILING DATE: 2001-08-10
PRIOR PILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: PRELSEQ for Windows Version 4.0
SEQ ID NO 59271
                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 CTGATGGTTCAGGAGGCAG 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 crearecricadeadecae 223
                                                                                                                                                                                                                                                                                                                                                                                                                      62 CTGATGGTTCAGGAGGCAG 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 CTGATGGTTCAGGAGGCAG 80
                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0
Matches 19; Conservative
                                                                                                                                                                                                                   ; TYPE: DNA
; ORGANISM: Homo sapien
US-10-301-480-59271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Homo sapien
US-10-301-480-59272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-301-480-59272/c
                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-301-480-59270/c

i Sequence 59270, Application US/10301480

i Sequence 59270, Application US/10301480

i Sequence 59270, Application US/10301480

i GENERAL INFORMATION:

i APPLICANT: Wang, David G.

i TITLE OF INVENTION: In the Human Genome

i FILE REFERENCE: 108827.137

i CURRENT APPLICATION NUMBER: US/10/301,480

i PRIOR APPLICATION NUMBER: US 60/211,598

i PRIOR APPLICATION NUMBER: US 60/311,695

i PRIOR PILING DATE: 2002-08-10

i NUMBER OF SEQ ID NOS: 1226818

i SEQ ID NO 52270

LENGTH: 506
                                                                     APPLICANT: Wang, David G.

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: In the Human Genome
FILE REPERENCE: 108827.137

CURRENT PILING DATE: 2002-11-21

RICHRANT PILING DATE: 2002-11-21

PRIOR PILING DATE: 2002-08-09

PRIOR PILING DATE: 2001-08-10

NUMBER: OF SEQ ID NOS: 1226818

SOFTWARE: FREESE FOR WINDOWN VERSION 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 59271, Application US/10301480
Publication No. US20660057564A1
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: In the Human Genome
PILE REPERENCE: 108827.137
CURRENT APPLICATION NUMBER: US/10/301,480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 12; Length 497;
27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 12; Length 506;
27:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.1%; Score 19; DB 100.0%; Pred. No. 27; Live 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 4.1%; Score 19; DB Best Local Similarity 100.0%; Pred. No. 27; Matches 19; Conservative 0; Mismatches
Sequence 1103289, Application US/10301480 Publication No. US20060057564A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 326 GGTAATGATGTTTTCTTCT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    158 GGTAATGATGTTTTTCTTCT 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241 CTGATGGTTCAGGAGGCAG 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGATGGTTCAGGAGGCAG 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
CORGANISM: Homo sapien
US-10-301-480-1103289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-301-480-59271/c
                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 1103289
LENGTH: 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-301-480-59270
```

ઠે 셤 ö

Gaps

ö

Indels

ö

ð 셤

```
US-10-027-632-208514, Application US/10027632

Sequence 2008514, Application US/10027632

Publication No. US20020198371A1

GENERAL INFORMATION:
TITLE OF INVENTION: David G.
TITLE OF INVENTION: Polymorphisms in the Human Genome
TITLE OF INVENTION: Polymorphisms in the Human Genome
TITLE REFREENCE: 108877.129

CURRENT FILING DATE: 2002-04-30

CURRENT FILING DATE: 2000-07-12

PRIOR FILING DATE: 2000-07-12

PRIOR FILING DATE: 2000-07-20

PRIOR FILING DATE: 2000-03-29

PRIOR FILING DATE: 1999-09-28

PRIOR FILING DATE: 1999-09-28

PRIOR FILING DATE: 1999-09-28

PRIOR FILING DATE: 1999-09-28

PRIOR FILING DATE: 1999-09-08

PRIOR FILING DATE: 1999-09-08

PRIOR FILING DATE: 1999-08-09

NUMBER OF SEQ ID NOS: 325720

SOFTWARE: FARENCE OF Windows Version 4.0
                                                                                                                                                                                                                            US-10-027-632-208513/Application US/10027632

Sequence 208513, Application US/10027632

Publication No. US20020198371A1

GENERAL INFORMATION:

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide

TITLE OF INVENTION: Dolymorphisms in the Human Genome

TITLE OF INVENTION: DOLYMORPHER: US/10/027,632

CURRENT FILING DATE: 2002-04-30

PRIOR FILING DATE: 2000-07-12

PRIOR PLICATION NUMBER: US 60/198,676

PRIOR PLICATION NUMBER: US 60/198,676

PRIOR PLILING DATE: 2000-04-20

PRIOR PLILING DATE: 2000-04-20

PRIOR PLILING DATE: 2000-03-29

PRIOR PLILING DATE: 1999-11-23

PRIOR PLILING DATE: 1999-11-23

PRIOR PLILING DATE: 1999-11-23

PRIOR PLILING DATE: 1999-11-23

PRIOR PLILING DATE: 1999-03-28

PRIOR PLILING DATE: 1999-03-38

PRIOR PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
4.1%; Score 19; DB
Best Local Similarity 100.0%; Pred. No. 27;
Matches 19; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240 crearestreadeadeade 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 CTGATGGTTCAGGAGGCAG 80
241 CTGATGGTTCAGGAGGCAG 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-301-48U-6/2081/C

Sequence 672681, Application US/10301480

Sequence 672681, Application No. US20060057564A1

GENERAL INFORMATION: 1020060057564A1

APPLICANT: Wang, David G.

TITLE OF INVENTION: 10 the Human Genome

TITLE OF INVENTION: 10 10-21-21

PRIOR PILING DATE: 2002-10-31

PRIOR PILING DATE: 2001-08-10

PRIOR PILING DATE: 2001-08-10

NUMBER OF SEQ ID NOS: 1226818

SOFTHARE: FREELEQ for Windows Version 4.0

SEQ ID NO 672681

LENGTH: 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
US-10-301-480-672680/C
i sequence 672680, Application US/10301480
i publication No. US20060057564A1
cardence 10 control of the first of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.0%; Pred. No. 27;
Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match

4.1%; Score 19; DB 12; Length 506;
Best Local Similarity 100.0%; Pred. No. 27;
Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                  Query Match

4.1%; Score 19; DB 12; Length 506;
Best Local Similarity 100.0%; Pred. No. 27;
Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 CTGATGGTTCAGGAGGCAG 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 CTGATGGTTCAGGAGGCAG 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 CTGATGGTTCAGGAGGCAG 223
                                                                                                                                                                                                                                                                                                                                                                                                                      62 CTGATGGTTCAGGAGGCAG 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , ORGANISM: Homo sapien US-10-301-480-672681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , ORGANISM: Homo sapien US-10-301-480-672680
                                                                                                      , ORGANISM: Homo sapien US-10-301-480-672679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-301-480-672681/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

62 CTGATGGTTCAGGAGGCAG 80

ö

Gaps

ö

DB 6; Length 520; 27; 0; Indels

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ## Sequence 208515, Application US/10027632

## Sequence 208515, Application US/10027632

## Publication No. US20020198371A1

## Septiment No. US20020198371A1

## Septiment No. US20020198371A1

## Septiment No. US20020198371A1

## TITLE OF INVENTION: David G.

## TITLE OF INVENTION: David G.

## TITLE OF INVENTION: Dolymorphisms in the Human Genome

## TITLE OF INVENTION: Dolymorphisms in the Human Genome

## TITLE OF INVENTION: Dolymorphisms in the Human Genome

## CURRENT APPLICATION NUMBER: US 60/18,006

## PRIOR PLILING DATE: 2000-04-20

## PRIOR PLILING DATE: 2000-04-20

## PRIOR PLILING DATE: 2000-04-20

## PRIOR PLILING DATE: 2000-03-29

## PRIOR PLILING DATE: 2000-03-29

## PRIOR PLILING DATE: 1999-11-23

## PRIOR PLILING DATE: 1999-09-28

## PRIOR PLILING DATE: 1999-09-09

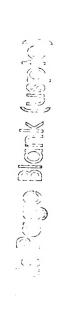
## NUMBER OF SEQ ID NOS: 325720

## SEQ ID NO 208515

## TYPR: NNA

##
                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ó
                                                                                                                                                                                                                                                        Query Match 4.1%; Score 19; DB 6; Length 520; Best Local Similarity 100.0%; Pred. No. 27; Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 4.1%; Score 19; DB 6; Length 520; Best Local Similarity 100.0%; Pred. No. 27; Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240 CTGATGGTTCAGGAGGCAG 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240 CTGATGGTTCAGGAGGCAG 222
                                                                                                                                                                                                                                                                                                                                                                                                                                 62 CTGATGGTTCAGGAGGCAG 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 CTGATGGTTCAGGAGGCAG 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
US-10-027-632-208515/c
; SEQ ID NO 208514
; LENGTH: 520
; TYPE: DNA
; ORGANISM: Human
US-10-027-632-208514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-208515
                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

Search completed: November 3, 2006, 23:12:50 Job time : 636.59 secs



Aah53757 S. epider
Abn3154 Staphyloc
Ad802625 Staphyloc
Ad84295 Human imm
Aak84294 Human imm
Aak84294 Human cDN
Aah15964 Human cDN
Ab114608 Drosophil
Adro7926 Full leng
Adr5968 S. epider
Adr5968 S. epider
Adr55018 S. epider
Adr55018 S. epider
Adr55018 S. epider
Adr55018 Juman can
Ad28387 Human imm
Ad89429 Oligonucl
Ad889425 Oligonucl
Ad889425 Oligonucl
Ad89425 Oligonucl
Ad89425 Oligonucl
Ad89425 Oligonucl
Ad89425 Secherich
Ad89525 Human imm
Aba89226 Bscherich
Aba79015 E. coli C
Adh80582 Escherich
Ad9331325 Human can
Ad937818 Human can
Ad937818 Human can

OM nucleic

Run on:

```
viriance gene; enterconsigning and consistent of the construction 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ds; array; pathotype; microorganism detection; infection; probe;
                                                                                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                                        AAD28387
AAK65263
ADS89699
ADS89425
                                                                                                                                                                                                                            AAK65264
AAK65265
ABA89226
AAI99368
AAI63718
ABS79015
                                                  AAK84294
AAH16394
AAH15964
ABL14608
                                                                                                                                                                                                                                                                                                             ADH80582
                                                                                                                                                                                                                                                                                                                                        ADQ97818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bekal S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-APR-2003; 2003US-00425821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-APR-2003; 2003US-00425821
                                                                                                                                                                                                                                                                                                              123
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADT98253 standard; DNA; 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
1356
1356
1356
1409
1409
12868
2889
3008
3206
4249
7434
10324
                                                                                                                                                                                                                12610
14136
14387
27324
32249
32249
                                                                                                                                                                                                                                                                                                                                       109661
                                                                                                                                                                                                                                                                                                            68611
84675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Brousseau R, Harel J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BROU/) BROUSSEAU R.
(HARE/) HAREL J.
(BEKA/) BEKAL S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-774932/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              coli cdtl DNA.
Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004219530-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-JAN-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-NOV-2004.
ADT98253;
                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADT98253
υυ
                                                                                                                                                                                                                                                                                                                             000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Adt 98253 E. coli cy
Adt8571 E coli cy
Abd32667 Wnuse can
Abd33452 Human lun
Adb33452 Human lun
Adb33450 Human nov
Abn77046 Human ORF
Abn77046 Human or
Abn77046 Human pro
Acf85026 Human pro
Acf85026 Human pro
Acf8501 Human pro
Acf8501 Lead Cere
Aef29701 Lead Cere
Aef29701 Lead Cere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human cDN
Drosophil
DNA encod
                                                                                   November 3, 2006, 20:16:55; Search time 273.593 Seconds (without alignments) 11926.532 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Plasmodiu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                       1 tgaaaataaatggaacacac......tggatgattgcaggagattt 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Aaa70256 B
Aaa70256 B
Aah04264 B
Ab114609 B
Ada29310 B
                                                                                                                                                                                                                                                                                               10489196
           GenCore version 5.1.9
Copyright (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                        5244920 seqs, 3486124231 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                            - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                 Bummaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAF85771
AB32667
AAS30115
AD833452
AAS30113
AD833450
ABN77046
AD124711
ACRS026
ABV6132
AACS3341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AEF29701
AAH12181
AAA70256
AAH04264
ABL14609
ADA29310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADT98253
                                                                                                                                                                                                OLIGO_NUC
Gapop_60.0 , Gapext 60.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               geneseqn2003cs:*
geneseqn2003ds:*
geneseqn2004as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                   geneseqn2000s:*
geneseqn2001as:*
geneseqn2001bs:*
geneseqn2002as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        geneseqn2004bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       genesegn2002bs:*
genesegn2003as:*
genesegn2003bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      geneseqn20058:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 geneseqn2006s:*
                                                                                                                                                                                                                                                                                                                                                                                                        geneseqn1980s:*
                                                                                                                                                                                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                Post-processing: Listing first 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2
                                                                                                                                             US-10-764-316-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length DB
                                                                                                                                                                                                                                                                                                                                                                                            N_Geneseq_8:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                822
83102
32189
32189
32221
32221
278
309
465
565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query
Match
                                                                                                                                                                                                Scoring table:
                                                                                                                                                          score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  744
1138
1188
1188
1188
1188
```

Database :

No. Result

0000

υ

Word size

Searched:

Sequence:

AACTGTTGTATCACGATCATCATCGCCATTAGAATTGGTAATGATGTTTTTCTTCTAAC

289

probes useful for identifying or characterizing New array of nucleic acid probes useful for identifying or characteri; a pathotype of a microorganism, for detecting the presence of a microorganism (e.g. Escherichia coli) or for assessing infections and diseases in a subject.

Claim 12; SEQ ID NO 10; 76pp; English

This invention describes a novel array and methods useful for identifying and concentrated and accorded an ancroorganism, for characterizing a pathotype of a microorganism (e.g. E. coll) in a sample, or for describing the presence of a microorganism (e.g. E. coll) in a sample, or for describing the infections and diseases has authory. The method comprises a tirst probe for a second probe for a first probe for a second pathorype of a species, each of the probes being bound to the substrate and adscreece location. The probes comprises a first probe for a second pathorype of a species of a microorganism and a sample; (b) determining the pathorype of pathorype of a microorganism in a subsect; (c) determining the pathorype of microorganism in a subsect; (c) disapposing a condition related to microorganism in a subsect; (c) disapposing a condition related to microorganism in a subsect; (c) disapposing a condition related to microorganism in a subsect; (c) disapposing a condition related with the family Encobacterizates of the microorganism in a subsect; (c) and the microorganism in a subsect; (c) and the family Encobacterizates of the microorganism is a subsect of the microorganism in a subsect of the microorganism is a subsect of the family Encobacterizates. (c) and the microorganism is a subsect of the microorganism in a subsect of the microorganism is a subsect of the microorganism in a subsect of the microorganism is a subsect of the microorganism in a subsect of the microorganism is a subsect of the microorganism in a subsect of the microorganism in a subsect of the microorganism is a second pathorypes each independently of the microorganism is a subsect of the microorganism in a subsect of the microorganism is a second pathorypes and the microorganism is a second pathorypes and the microorganism is a second pathorypes and the subsect of the microorganism is a second pathorype and the subsect of the subsect o

Sequence 412 BP; 112 A; 85 C; 89 G; 126 T; 0 U; 0 Other;

ö 169 charharcaccachagharrararararrarararararararachacharag 228 9 0; Gaps Length 412; 0, Indels 64.1%; Score 300; DB 13; I 100.0%; Pred. No. 2.2e-147; ive 0; Mismatches 0; Query Match Best Local Similarity 100.0 Matches 300; Conservative Н 셤 ઠે

The present invention provides an agent comprising a targeting moiety and an agent capable of inhibiting cell division in a target cell of interest. The second component may be the cytolethal distending toxin cdfb, which is encoded by the present sequence. This can be used in the treatment of cell proliferation disorders, including cancer and positions, to inhibit mitosis, or to treat infection by an intracellular 240 Agent for treating proliferative disorders and intracellular infection comprises a targeting moiety and a component. CCATGCATTGGCGAATCGGGCGTGGATTCAGGAGCAATTGTAAATAGTGTTTTTGAGTT CITCAACAGACAAACGGATCCTATAAGACAGGCCGCTAACTGGATGATTGCAGGAGATTT Cytolethal distending toxin, Cdt.A; Cdt.B; actin cytoskeleton; D? mitotic block; proliferative cell disorder; cancer; psoriasis; pathogen infection; ds. Sequence 822 BP; 229 A; 157 C; 188 G; 248 T; 0 U; 0 Other; Length 822; 1,8e-12; nes 0; Indels coli cytolethal distending toxin CdtB coding sequence. 9.4%; Score 44; DB 4; 100.0%; Pred. No. 1.8e-1: iive 0; Mismatches (MICR-) MICROBIOLOGICAL RES AUTHORITY. Location/Qualifiers 1. .822 /\*tag= a /product= "CdtB" Henderson I; Claim 19; Page 37; 38pp; English. AAF85771 standard; DNA; 822 BP. 99GB-00026875. 13-NOV-2000; 2000WO-GB004329 (first entry) Charlton S, WPI; 2001-328941/34. P-PSDB; AAB60971. Escherichia coli. WO200134205-A2 12-NOV-1999; 10-DEC-2001 17-MAY-2001 Query Match Best Local S Purdy D, pathogen AAF85771; 349 121 409 RESULT 2 **AAF8577** 셤 ò ò

GATCCTATAAGACAGGCGCTAACTGGATGATTGCAGGAGATTT 468 Local Similarity 100. 532 Matches ò g

> 288 120

229 AGTAAATCTTGCGATTGTTTCAAACAGAAGAGCTGATGAGGGTGATTGTATTACCTCCTCC 

61

ð g

ö

Gaps

;

g

```
The invention relates to an isolated nucleic acid comprising at least 10 contiguous nucleotides of any of the 233 polymucleotide sequences given in the specification, or its complement. The nucleic acids encode cancer-associated proteins Alos included are an expression vector comprising the above recombinant nucleic acid cited above, a host cell comprising the above recombinant nucleic acid cited above, a host cell comprising the above recombinant nucleic acid corexpression vector, a microarray for detecting a cancer-associated (CA) nucleic acid comprising at least 10 contiguous nucleotides of any of the above comprising at least 10 contiguous nucleotides of any of the above on open reading frame of a CA sequence selected from any of the 95 polymucleotide sequences, an isolated antipod in the specification, or its complement), an isolated antibody, or its antigen binding fragment) that comprising the above polymeptide, a hybridoma that produces the above nucleotide sequence antibody, a pharmaceutical composition comprising the above nucleotide articled excipient, a kit for detecting cancer antibody and a pharmaceutical excipient, a kit for detecting cancer or for detecting the presence or absence of cancer cells in an individual, a method for inhibiting athorapeutic agent to cancer cells in an individual, a method for delivering a therapeutic agent to cancer cells in an individual, a method for delivering at therapeutic agent condition of the activity of for abloactive agent capable of modulacing the activity of the above polypeptide in a test cell sample, a method for their fragments), methods for detecting cancer cells in an individual, an electronic library comprising the above which expression of a polypeptide in a test cell sample and associated with expression of a polypeptide in a test cell sample concers and associated with expression of a polypeptide in a test cell sample cancer and associated with expression of a polypeptide in a test cell sample cancer. The present sequence is a mount of the printed 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated cancer-associated polynucleotides and polypeptides useful for diagnosing, preventing or treating cancers, especially lymphoma and leukemia, or in screening for agents that modulate cancer.
                                                                                                                                                                                                                  Mouse; ds; cancer-associated protein; gene; cytostatic; cancer; leukaemia; lymphoma; CAP.
                                                                                                                                                                       Mouse cancer-associated genomic DNA MD13-073.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disclosure; seqid 212; 310pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Malandro MS;
                                      ABD32667 standard, DNA; 83102 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-MAR-2003; 2003US-003B8B38
15-APR-2003; 2003US-00417375.
13-UNV-2003; 2003US-00461862.
15-SEP-2003; 2003US-00663131.
15-DEC-2003; 2003US-00737318.
                                                                                                                                                                                                                                                                                                                                                                                                                  17-FEB-2004; 2004WO-US004730.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SAGR-) SAGRES DISCOVERY INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-FEB-2003; 2003US-00367094
                                                                                                                             18-NOV-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Morris DW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-652914/63.
                                                                                                                                                                                                                                                                                                                           WO2004074320-A2.
                                                                                                                                                                                                                                                                                    Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                         02-SEP-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Morris DW,
                                                                                    ABD32667;
                    ABD32667/c
RESULT 3
```

```
ö
                                                                                                                                                                                                                                                                                              Lung antigen protein; human; mouse; rabbit; goat; horse; cat; dog; chicken; abheep; immunosupressive; antiarthritic; vasotropic; antiproliferative; cytostatic; cardiant; neuroprotective; ootropic; antibacterial; virucide; fungicide; cancer; ophthalmological; vulnerary; gene therapy; autoimmune disease; neoplasm; hyperproliferative disorder; breast; liver; cardiovascular disorder; descebrovascular disorder; breast; liver; cardiovascular disorder; descebrovascular disorder; neurous system disorder; bacterial infection; fungal infection; ocular disorder; respiratory disorder; wound healing; skin aging; organ transplanteation; food preservative; tissue regeneration; anti-infertility; food additive.
Sequence 83102 BP; 23417 A; 17147 C; 17240 G; 24360 T; 0 U; 938 Other;
                                                          ö
                          Score 20; DB 13; Length 83102;
Pred. No. 7.7;
                                                       0; Indels
                                   100.0%; Prec. ...
                                                                                                                                                                                                                                                                      Human lung antigen genomic DNA #185.
                                                                                                 3009 ATTTAGCACTCCTGGTATTC 2990
                                                                                  118 ATTTAGCACTCCTGGTATTC 137
                                                                                                                                                                                   AAS30115 standard; DNA; 32189 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-MAR.-2000; 2000US-0199076P.
18-APR-2000; 2000US-0199076P.
19-MAY-2000; 2000US-0198123P.
07-JUN-2000; 2000US-0214886P.
28-JUN-2000; 2000US-0214886P.
07-JUL-2000; 2000US-0216847P.
07-JUL-2000; 2000US-021684P.
11-JUL-2000; 2000US-0217496P.
11-JUL-2000; 2000US-0218290P.
26-JUL-2000; 2000US-0218290P.
26-JUL-2000; 2000US-0220964P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-AUG-2000; 2000US-0224518P.
14-AUG-2000; 2000US-0224519P.
14-AUG-2000; 2000US-0225214P.
14-AUG-2000; 2000US-0225214P.
14-AUG-2000; 2000US-0222266P.
14-AUG-2000; 2000US-0222266P.
14-AUG-2000; 2000US-0222568P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-FEB-2000; 2000US-0184664P.
02-MAR-2000; 2000US-0186350P.
16-MAR-2000; 2000US-0189874P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0225447P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JAN-2001; 2001WO-US001301
                                                                                                                                                                                                                                           (first entry)
                                                       Conservative
                   Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200155303-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                           21-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-AUG-2001
                                                                                                                                                                                                                AAS30115;
                                                                                                                                                       RESULT 4
                                                                                                                                                                      AAS30115
                                                                                                          셤
                                                                                   ઠે
```

2000US-0226681P

```
2000US-0241808P.
2000US-0241809P.
2000US-024647P.
2000US-0246477P.
2000US-0246477P.
2000US-0246477P.
2000US-0246477P.
2000US-024647P.
2000US-024647P.
2000US-024623P.
2000US-0246524P.
2000US-024652P.
2000US-024652P.
2000US-024652P.
2000US-024652P.
2000US-024652P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0234991P.
2000US-0234998P.
2000US-0235844P.
2000US-0235834P.
2000US-0235836P.
2000US-0236367P.
2000US-0236367P.
2000US-0236367P.
2000US-0236367P.
2000US-0236370P.
2000US-0236370P.
2000US-0236370P.
2000US-0236370P.
2000US-0236370P.
2000US-0236377P.
2000US-0239337P.
2000US-0239337P.
2000US-0239335P.
2000US-0239935P.
2000US-0239935P.
2000US-0239935P.
2000US-0239935P.
                                2000US-0227009P.
2000US-0228924P.
2000US-0229343P.
2000US-0229344P.
2000US-0229344P.
2000US-0229344P.
2000US-0229343P.
2000US-0229509P.
2000US-023943P.
2000US-0231243P.
2000US-0231243P.
2000US-0231244P.
2000US-0231244P.
2000US-0231444P.
2000US-0231444P.
2000US-0231444P.
2000US-0231444P.
2000US-0231444P.
2000US-023144P.
2000US-0231444P.
2000US-0231444P.
2000US-023344P.
2000US-023398P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0246611P
2000US-0246613P
2000US-0249207P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
17-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-SEP-2000;
29-SEP-2000;
29-SEP-2000;
02-OCT-2000;
02-OCT-2000;
02-OCT-2000;
03-OCT-2000;
22-AUG-2000; 23-AUG-2000; 23-AUG-2000; 23-AUG-2000; 23-AUG-2000; 23-AUG-2000; 20-AUG-2000; 20-AU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-SEP-2000;
```

```
XX Sequences AAS3991-AAS30164 represent genomic DNA molecules, which encode the lung antigen polypeptides of the invention. Lung antigen polypeptides of the lung antigen polypeptides of the lung antigen polypeptides are useful in the diagnosis, creatment and prevention of various types of disorders in e.g. humans, concert rabbits, goats, horses, cats, dogs, chickens or sheep. A mice, rabbits, goats, horses, cats, dogs, chickens or sheep. A condition can be determined by detecting the presence or pathological condition can be determined by detecting the presence or disorders include autoimmune diseases such as rheumatoid arthritis, chyperproliferative disorders such as cardiac arrest, creborovascular cardiovascular disorders such as cardiac arrest, creborovascular disorders such as cardiac arrest, creborovascular cardiovascular disorders such as cardiac arrest, orivuses and fungi, coular disorders such as corneal infection, endocrine disorders such as corneal infection, endocrine disorders such as corneal infection, orivuses and fungi, coular disorders such as asthma and pleurisy. The polypeptides can calso be used to aid wound healing, to prevent skin aging due to sumburn, consideration, or demotaxis. The polypeptides can also be used to aid wound healing, to prevent skin aging due to sumburn, consideration, or increase or decrease storage capabilities. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from MIPO at the published_pot_equences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Isolated polypeptide for treating, preventing and/ or prognosing respiratory disorders related to the lung including lung cancers and also for testing and detection e.g. diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 379; 507pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rosen CA, Barash SC, Ruben SM
                                                                 2000US-0249212P.
2000US-0249213P.
2000US-0249213P.
2000US-0249214P.
2000US-0249214P.
2000US-0249214P.
2000US-0249244P.
2000US-0249244P.
2000US-0249244P.
2000US-0249244P.
2000US-0249244P.
2000US-0249244P.
2000US-0249244P.
                                                                                                                                                                                                                                                                                                                                                                                    2000US-0256719P.
2000US-0251479P.
2000US-0251856P.
                                                                                                                                                                                                                                                                                                                                 2000US-0250391P.
2000US-0251030P.
2000US-0251988P.
                                                                                                                                                                                                                                                                                                                                                                                                                                        2000US-0251868P.
2000US-0251869P.
2000US-0251989P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0251990P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-DEC-2000; 2000US-0254097P
05-JAN-2001; 2001US-0259678P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-457723/49.
                                                                                                                                                                                                                                                                                                 17-NOV-2000; 2
01-DBC-2000; 2
05-DBC-2000; 2
05-DBC-2000; 2
05-DBC-2000; 2
06-DBC-2000; 2
08-DBC-2000; 2
08-DBC-2000; 2
08-DBC-2000; 2
08-DBC-2000; 2
17-NOV-2000; 2
```

Query Match

4.1%; Score 19; DB 5; Length 32189;
Best Local Similarity 100.0%; Pred. No. 26;
Matches 19; Conservative 0; Mismatches 0; Indels (

ö

Gape

```
01-SEP-2000; 2000US-0229287P

01-SEP-2000; 2000US-0229343P

01-SEP-2000; 2000US-0229344P

05-SEP-2000; 2000US-0229345P

05-SEP-2000; 2000US-0229509P

06-SEP-2000; 2000US-0239513P

06-SEP-2000; 2000US-0231244P

08-SEP-2000; 2000US-0231244P

08-SEP-2000; 2000US-0231244P

08-SEP-2000; 2000US-0231414P

08-SEP-2000; 2000US-0231414P

08-SEP-2000; 2000US-023196BP

14-SEP-2000; 2000US-023196BP

14-SEP-2000; 2000US-023196BP

14-SEP-2000; 2000US-023196BP

14-SEP-2000; 2000US-023196BP

14-SEP-2000; 2000US-023196BP

14-SEP-2000; 2000US-0232394P

14-SEP-2000; 2000US-0232399P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0233064P
2000US-0233064P
2000US-0234054P
2000US-023423P
2000US-0234234P
2000US-0234234P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0235484P
2000US-0235834P
2000US-0235837P
2000US-0236367P
2000US-0236368P
2000US-0236368P
2000US-0236369P
2000US-0236370P
2000US-0236370P
2000US-0236370P
2000US-0236370P
2000US-0237039P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0239937P.
2000US-0240960P.
2000US-0241221P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-0241786P.
2000US-0241787P.
2000US-0241808P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0241785P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0241809P.
2000US-0241826P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0244617P.
2000US-0246474P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0246478P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-NOV-2000; 2000US-0249209P
17-NOV-2000; 2000US-0249210P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-SEP-2000; 214-SEP-2000; 21-SEP-2000; 21-SEP-2000; 21-SEP-2000; 25-SEP-2000; 25-SEP-2000; 27-SEP-2000; 27-S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-0CT-2000)
02-0CT-2000)
02-0CT-2000)
02-0CT-2000)
13-0CT-2000)
13-0CT-2000)
20-0CT-2000)
20-0CT-2000)
20-0CT-2000)
20-0CT-2000)
20-0CT-2000)
20-0CT-2000)
20-0CT-2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-NOV-2000;
        The gene therapy; lung antigen; neoplasia; acute myelogenous leukaemia;

The denocarcinoma; respiratory disorder; chronic rhinitis; sinusitis;

The immundeficiency; X-linked agammaglobulinaemia;

Thinked infantile agammaglobulinaemia;

The same sickness;

The palyarteritile nodose;

The palyarteritile nodose;

The palyarteritile agammaglobulinaemia;

The palyarteritile agammaglobulinaemia;

The palyarteritile adisease;

The multiple myeloma; macrophage related disorder; gaucher; disease;

The palyarteritile myeloma; macrophy; nervous disorder; schaemic lesion;

The palyarteritile disorder; Cushing's syndrome;

The palyarteritile disorder; disparteritile disorder; disparteritile disorder;

The palyarterities disparterities disparter
                                                                                                                                                                                                                                                  Human novel lung related polypeptide DNA SEQ ID NO 379.
23959 CTGATGGTTCAGGAGGCAG 23977
                                                                                                                              ADB33452 standard; DNA; 32189 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0184664P

2000US-0184664P

2000US-0189834P

2000US-01913P

2000US-01913P

2000US-020467P

2000US-020467P

2000US-0214886P

2000US-0214886P

2000US-0214886P

2000US-0214886P

2000US-0214886P

2000US-0214886P

2000US-021488P

2000US-021487P

2000US-021487P

2000US-021481P

2000US-021481P

2000US-0225213P

2000US-022964P

2000US-022966P

2000US-022966P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0227182P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-FEB-2002; 2002US-00079854
                                                                                                                                                                                                             04-DEC-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003054368-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-PEB-2000;
24-PEB-2000;
16-MAR-2000;
11-MAR-2000;
18-MAY-2000;
19-MAY-2000;
28-JUN-2000;
20-JUN-2000;
07-JUN-2000;
07-JUN-2000;
07-JUL-2000;
11-JUL-2000;
11-JUL-2000;
26-JUL-2000;
26-JUL-2000;
26-JUL-2000;
26-JUL-2000;
26-JUL-2000;
26-JUL-2000;
26-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-AUG-2000;
18-AUG-2000;
18-AUG-2000;
18-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-AUG-2000;
23-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-MAR-2003
                                                                                                                                                                      ADB33452;
                                                                                     RESULT 5
ADB33452
```

```
Novel isolated lung antigen polypeptides useful for treating, preventing, diagnosing acute myelogenous leukemias, adenocarcinoma, thrombocytopenia, von Willebrand's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.0%; Pred. No. 26;
Matches 19; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; SEQ ID NO 379; 178pp; English.
                                                                                                                                                                                                                                                                                                                                                            Rosen CA, Ruben SM, Barash SC;
              17-NOV-2000; 2000US-0249213F.
17-NOV-2000; 2000US-0249213F.
17-NOV-2000; 2000US-0249213F.
17-NOV-2000; 2000US-0249216F.
17-NOV-2000; 2000US-0249216F.
17-NOV-2000; 2000US-0249218F.
17-NOV-2000; 2000US-024924F.
17-NOV-2000; 2000US-024924F.
17-NOV-2000; 2000US-024924F.
17-NOV-2000; 2000US-024926F.
17-NOV-2000; 2000US-024929F.
17-NOV-2000; 2000US-024929F.
17-NOV-2000; 2000US-024929F.
17-NOV-2000; 2000US-024930F.
01-DEC-2000; 2000US-0250160F.
01-DEC-2000; 2000US-025018BF.
05-DEC-2000; 2000US-0251139F.
05-DEC-2000; 2000US-0251139F.
                                                                                                                                                                                                                                   08-DEC-2000; 2000US-0251856P-08-DEC-2000; 2000US-0251868P-08-DEC-2000; 2000US-0251869P-08-DEC-2000; 2000US-0251989P-
                                                                                                                                                                                                                                                                                                                                       (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                               08-DEC-2000; 2000US-0251990P
                                                                                                                                                                                                                                                                                           2000US-0254097P
                                                                                                                                                                                                                                                                                                                 17-JAN-2001; 2001US-00764878
                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-695900/66.
```

```
The invention relates to an isolated lung antigen polypeptide sequence or encoded sequence in a cDNA clone. The polypeptide and its polynucleotide are useful for treating, preventing, diagnosing and/or prognosing dispensing and/or prognosing considers and/or disorders such as pathological cell proliferative disorders such as pathological cell proliferative reeplasts e.g. acute myelogenous leukaemias, adenocarcinoma; respiratory neoplasts e.g. acute myelogenous leukaemias, adenocarcinoma; respiratory reconsiders such as chronic finities, sinualitis, immunodeficiencies such as x-linked agammaglobulinaemia, X-linked infantile agammaglobulinaemia, X-linked infantile nodosa; bleeding disorders conch as strompic princes; polystretitis nodosa; bleeding disorders cuch as thrombocytopenia, Von Willabrand's disease; acquired platelet dystunction such as kidney failure, multiple myeloma; disorders concer; caucher: schonbers and/or macrophage function such as associated with macrophage numbers and/or macrophage function such as associated vith macrophage numbers disease; borne disorders such as Alberts-Schonbers disease, bowlegs; muscele concer; renal disorders such as kidney failure, nephritis; borne disorders such as Becker's muscular dystrophy, buchenne's muscular dystrophy, nervous disorders such as ischaemic lesions, traumatic lesions concerned to the concerned of the
```

```
23959 CTGATGGTTCAGGAGGCAG 23977
                                                                            RESULT 6
AAS30113
ID AAS30113 standard; DNA; 32221 BP.
62 CTGATGGTTCAGGAGGCAG 80
    ò
```

Gaps . 0 08-SEP-2000; 2000US-0231242P 08-SEP-2000; 2000US-0231243P

```
chicken; sheep; immunosuppressive; antiarthritic; vasotropic; chicken; sheep; immunosuppressive; antiarthritic; vasotropic; antirheumatic; antiproliferative; cytostatic; cardiant; neuroprotective; cerebroprotective; nootropic; antibacterial; virucide; fungicide; cancer; ophthalmological; vulnerary; gene therapy; autoimmune disease; neoplasm; hyperproliferative disorder; breast; liver; cardiovascular disorder; de; fungal infection; viral infection; coular disorder; become; infection; gastrointestinal disorder; respiratory disorder; wound healing; skin aging; organ transplantation; food preservative; tissue regeneration; anti-infertiilty; food additive.
                                                   Human lung antigen genomic DNA #183.
                                                                                                                                                                                                                                                                                                                                                                                                     2000US - 02209467P.
2000US - 0214886P.
2000US - 0214886P.
2000US - 0216880P.
2000US - 0216880P.
2000US - 0212890P.
2000US - 0212890P.
2000US - 0212890P.
2000US - 02284518P.
2000US - 0228513P.
2000US - 0228513P.
2000US - 0228518P.
2000US - 0228570P.
2000US - 022858P.
2000US - 022858P.
2000US - 0228578P.
2000US - 0228578P.
2000US - 022858P.
2000US - 022858P.
2000US - 0228578P.
2000US - 0228578P.
2000US - 0228778P.
2000US - 0228778P.
2000US - 0228778P.
2000US - 0228778P.
                                                                                                                                                                                                                                                                                                                                                           2000US-0189874P
                                                                                                                                                                                                                                                                                     17-JAN-2001; 2001WO-US001301
                             21-NOV-2001 (first entry)
                                                                                                                                                                                                                                           WO200155303-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-AUG-2000;
14-AUG-2000;
14-AUG-2000;
14-AUG-2000;
14-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-SEP-2000;
01-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-SEP-2000;
                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                02-AUG-2001
           AAS30113;
```

```
2000US-0232080P
2000US-0232081P
2000US-023194B
2000US-0232397P
2000US-0232398P
2000US-0232398P
                                                                                                                                                 2000US-0235836P
2000US-023637P
2000US-0236367P
2000US-0236368P
2000US-0236368P
2000US-023638P
2000US-0236370P
200US-023638P
200US-023638P
200US-0237037P
                                                                                               2000US-0233065P.
2000US-0234223P.
2000US-0234274P.
2000US-0234997P.
                                                                        2000US-0232401P.
2000US-0233063P.
2000US-0233064P.
                                                                                                                             2000US-0234998P.
2000US-0235484P.
2000US-0235834P.
                                                                                                                                                                                                                                                                                                                                                    2000US-0246478P.
2000US-0246523P.
2000US-0246524P.
                                                                                                                                                                                                                                                                                                                                             2000US-0246477P
                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-0249208P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0249210P.
2000US-0249211P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0249264P
                    08-SEP-2000;
08-SEP-2000;
12-SEP-2000;
14-SEP-2000;
14-SEP-2000;
                                                                        14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
                                                                                              14-SEP-2000;
21-SEP-2000;
25-SEP-2000;
25-SEP-2000;
26-SEP-2000;
26-SEP-2000;
27-SEP-2000;
27-SEP-2000;
29-SEP-2000;
29-SEP-2000;
29-SEP-2000;
                                                                                                                                                                                      29-58P-2000
02-0CT-2000
02-0CT-2000
02-0CT-2000
02-0CT-2000
13-0CT-2000
13-0CT-2000
13-0CT-2000
20-0CT-2000
                                                                                                                                                                                                                                                                                                                                           08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                 08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
                                                          14-SEP-2000;
                                                                                                                                                                                                                                                                                                                            08-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                       -NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-NOV-2000;
                                                                                                                                                                                                                                                                                                             01-NOV-2000
08-NOV-2000
                                                                                                                                                                                 29-SEP-2000
```

```
Sequences AAS2991-AAS30164 represent genomic DNA molecules, which encode the lung antigen polypeptides of the invention. Lung antigen polypeptides of the invention. Lung antigen polypeptides care defected in the diagnosis, treatment and prevention of various types of disorders in e.g. humans, concerns the read of disorders in e.g. humans, concerns the read of disorders include autolimume diseases such as rheumatoid arthritis, absence of a mutation in a lung antigen polymucleotide. The treatable conficted autolimume diseases such as rheumatoid arthritis, hyperproliferative disorders such as neoplasms of the breast or liver, cardiovascular disorders such as cardiac arrest, cerborovascular cardisorders such as cardiac arrest, cerborovascular chisoraens auch as cardiac arrest, cerborovascular such as cardiac arrest, cerborovascular condisorders such as cardiac arrest, cerborovascular and socrates such as cardiac arrest, viruses and fungi, condiar disorders such as corneal infection, endocrine disorders such as corneal infection, endocrine disorders such as corneal infection, endocrine disorders such as softwa and pleurisy. The polypeptides can also be used to aid wound healing, to prevent skin aging due to sunburn, con maintain organs before transplantation, to regenerate tissues and in chemetaxis. The polypeptides can also be used as a food additive or contract or increase or decrease storage capabilities. Note: The sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed at fitp.wipo.int/pub/published_pot_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Isolated polypeptide for treating, preventing and/or prognosing respiratory disorders related to the lung including lung cancers and also for testing and detection e.g. diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
4.1%; Score 19; DB 5; Length 32221;
Best Local Similarity 100.0%; Pred. No. 26;
Matches 19; Conservative 0; Mismatches 0; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human novel lung related polypeptide DNA SEQ ID NO 377.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 377; 507pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23989 CTGATGGTTCAGGAGCAG 24007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADB33450 standard; DNA; 32221 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Rosen CA, Barash SC, Ruben SM;
             17-NOV-2000; 2000US-0249297P.
17-NOV-2000; 2000US-0249297P.
17-NOV-2000; 2000US-0249300P.
01-DEC-2000; 2000US-0250160P.
01-DEC-2000; 2000US-0250391P.
05-DEC-2000; 2000US-0251030P.
05-DEC-2000; 2000US-025109P.
06-DEC-2000; 2000US-025109P.
08-DEC-2000; 2000US-025106P.
08-DEC-2000; 2000US-025106P.
08-DEC-2000; 2000US-025106P.
08-DEC-2000; 2000US-025106P.
08-DEC-2000; 2000US-025106P.
08-DEC-2000; 2000US-025106P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 CIGAIGGIICAGGAGGCAG 80
                                                                                                                                                                                                                                                                                                                                               05-JAN-2001; 2001US-0259678P
                                                                                                                                                                                                                                                                                                                                                                                          (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-457723/49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADB33450;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 7
ADB33450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
ઠ
```

```
quene therapy; lung antigen; neoplasia; acute myelogenous leukaemia;
adenocarcinoma; respiratory disorder; chronic rhinitis; sinusitis;
immunodeficiency; X-linked agammaglobulinaemia;
immunodeficiency; X-linked agammaglobulinaemia; inflammatory disorder;
w X-linked infantile agammaglobulinaemia; inflammatory disorder;
adrenalitis; alveolitis; immune complex disease; serum sickness;
polyarteritis nodosa; bleeding disorder; thrombocytopenia;
w Von Willebrand's disease; acquired platelet dysfunction; kidney failure;
w Noimann-Pick disease; tumour; colon cancer; pancreatic cancer;
w Neimann-Pick disease; tumour; colon cancer; pancreatic cancer;
w neal disorder; nephritis; bone disorder; Albera-Schonberg disease;
bowleg; muscle disorder; bene disorder; Albera-Schonberg disease;
bowleg; muscle disorder; nervous disorder; lesion;
buchenne's muscular dystrophy; nervous disorder; idshaemic lesion;
craumatic lesion; endocrine disorder; Cushing's syndrome;
corticosteroid deficiency; gastrointestinal disorder; dysphagia;
"W gastric reflux; human; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000US-0179065P.
2000US-018662BP.
2000US-018664P.
2000US-0188774P.
2000US-0198774P.
2000US-0198774P.
2000US-0198774P.
2000US-0198774P.
2000US-0219467P.
2000US-0219467P.
2000US-0219487P.
2000US-0219487P.
2000US-0219487P.
2000US-0219487P.
2000US-0219487P.
2000US-0219487P.
2000US-0219487P.
2000US-0219487P.
2000US-0219487P.
2000US-022566P.
2000US-022566P.
2000US-022566P.
2000US-022568P.
2000US-022568P.
2000US-022576P.
2000US-022576P.
2000US-022576P.
2000US-022576P.
2000US-022576P.
2000US-022576P.
2000US-022576P.
2000US-022576P.
2000US-022576P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0229343P.
2000US-0229344P.
2000US-0229345P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0231242P.
2000US-0231243P.
2000US-0231244P.
2000US-0231413P.
2000US-0231414P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0229509P.
2000US-0229513P.
2000US-0230437P.
                                                                                                                                                                                                                                                                                                                                                                                                                                          22-FEB-2002; 2002US-00079854
                                                                                                                                                                                                                                                                                                                                                                   US2003054368-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-JAN-2000; 2
24-FEB-2000; 2
24-FEB-2000; 2
16-MAR-2000; 2
11-MAR-2000; 2
19-MAY-2000; 2
19-MAY-2000; 2
28-JUN-2000; 2
28-JUN-2000; 2
27-JUL-2000; 2
26-JUL-2000; 2
11-JUL-2000; 2
26-JUL-2000; 2
11-JUL-2000; 2
14-AUG-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-SEP-2000;
08-SEP-2000;
08-SEP-2000;
08-SEP-2000;
                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                          20-MAR-2003
```

2000US-0237039P 2000US-0239337P 2000US-0241221P 2000US-0241221P 2000US-0241786P 2000US-0241786P 2000US-0241786P 2000US-0241786P 2000US-0241786P 2000US-024186P 2000US-024186P 2000US-024186P 2000US-024186P 2000US-024186P 2000US-024186P 2000US-024186P 2000US-0246474P 2000US-0246474P 2000US-0246474P 2000US-0246478P 2000US-0246478P 2000US-0246478P 2000US-0246478P 2000US-0246478P 2000US-0246478P 2000US-0246478P 2000US-0246478P 2000US-0246478P 2000US-0246528P 2000US-0246513P 2000US-0249213P 2000US-0249213P 2000US-0249213P 2000US-0249213P 2000US-0249213P 2000US-0249218P 2000US-0249218P 2000US-0232081P.
2000US-023281P.
2000US-0232397P.
2000US-0232399P.
2000US-0232399P.
2000US-0232400P.
2000US-0232400P.
2000US-0232400P.
2000US-0232400P.
2000US-023409P.
2000US-023499P.
2000US-023499P. 2000US-0249244P. 2000US-0249245P. 2000US-0249264P. 2000US-0249265P. 2000US-0249297P. 2000US-0249299P. 17-NOV-2000; 17-NOV-2000; 17-NOV-2000; 17-NOV-2000; 17-NOV-2000; 17-NOV-2000; 17-NOV-2000; 20-OCT-2000; 20-OCT-2000; 20-OCT-2000; 20-OCT-2000; 20-OCT-2000; 20-OCT-2000; 20-OCT-2000; 20-OCT-2000; 20-OCT-2000; 08-NOV-2000; 08-NOV-2000; 08-NOV-2000; 08-NOV-2000; 08-NOV-2000; 27-SEP-2000; 27-SEP-2000; 29-SEP-2000; 29-SEP-2000; 29-SEP-2000; 29-SEP-2000; 02-OCT-2000; 02-OCT-2000; 21-SEP-2000; 21-SEP-2000; 25-SEP-2000; 25-SEP-2000; 08-NOV-2000; 08-NOV-2000; 08-NOV-2000; 08-NOV-2000; 38-NOV-2000; 17-NOV-2000; 17-NOV-2000; L7-NOV-2000; 17-NOV-2000; 17-NOV-2000; 08-NOV-2000; 08-NOV-2000; 08-NOV-2000; 26-SEP-2000; 

growth disorder; tissue regeneration disorder; diabetes mellitus;

```
The invention relates to an isolated lung antigen polypeptide sequence or encoded sequence in a cDNA clone. The polypeptide and its polynucleotide are useful for treating, preventing, diagnosing and/or prognosing classases and/or disorders such as pathological cell proliferative consolaries such as chronic rhinitis, simusitis; immunodeficiencies such as chronic rhinitis, simusitis; immunodeficiencies such as consolaries and as adrenalitis, alveolitis; immune complex classases such as serum sickness, polyarteritis nodosa; bleeding disorders classases such as serum sickness, polyarteritis nodosa; bleeding disorders such as thrombocytopenia, von Willebrand's disease; acquired platelet classociated with macrophage numbers and/or macrophage function such as secum sickness; consolaries classase, Neimann-lick disease; umours such as colon cancer, pancreatic cancer; renal disorders such as kidney failure, moltiple myeloma; disorders such as Albers-Schonberg disease; bowlegs; muscular classase, bowlegs; muscular disorders such as Albers-Schonberg disease, bowlegs; muscular classase, bowlegs; muscular classases and a such as schoberg such as 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel isolated lung antigen polypeptides useful for treating, preventing, diagnosing acute myelogenous leukemias, adenocarcinoma, thrombocytopenia, Von Willebrand's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             endocrine disorders such as Cushing's syndrome, corticosteroid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; SEQ ID NO 377; 178pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rosen CA, Ruben SM, Barash SC;
                                                                                             20000S-0251030P
20000S-0251988P
20000S-0251479P
20000S-0251879P
20000S-0251868P
20000S-0251868P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001US-00764878.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HUMA-) HUMAN GENOME SCI INC.
2000US-0250160P
2000US-0250391P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0251989P.
2000US-0251990P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0254097P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-695900/66
                                                                                                                                                    05-DEC-2000;
05-DEC-2000;
                                                                                                                                                                                                                                                            06-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-JAN-2001;
                                                                                                        05-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                         08-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                     08-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-DEC-2
```

```
Query Match
Best Local Similarity 100.0%; Pred. No. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; ORF; open reading frame; ORFX; drug screening; diagnosis; disease monitoring; cytokine; cell proliferation; call differentiation; immune modulation; hematopoiesis regulation; tissue growth; angiogenesis; activin; inhibin; chemotactic; chemokinetic; haemostatic; thrombolytic; tumour inhibition; bodily characteristic; fertility; behaviour; cancer; proliferative disorder; neurological disorder; cardiovascular disease; immune system disorder; organ transplantation;
                                                                   ö
             DB 10; Length 32221; 26;
                                                                0; Indels
                                     100.0%; Pred. No. 26; ive 0; Mismatches
             4.1%; Score 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human ORF1993 cDNA, SEQ ID NO:3985.
                                                                                                                                                                 23989 crcarccrrrcacaccac 24007
                                                                                                                   CTGATGGTTCAGGAGGCAG 80
                                                                                                                                                                                                                                                                                                ABN77046 standard; cDNA; 278 BP.
                                                                                                                                                                                                                                                                                                                                                                                                       08-JUL-2002 (first entry)
Query Match
Best Local Similarity 100.0
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                      ABN77046;
                                                                                                                   62
                                                                                                                                                                                                                                             RESULT 8
```

\$&&&&&&&&&&&

셤

ò

ö

Gaps

ö

0; Indels

83 GCAGTACCAGCTTCTGCA 100

Score 18; DB 6; Length 278; Pred. No. 95;

```
Geguences ABP31028-ABP35561 represent 4534 novel human proteins
CG designated ORF (Open reading frame) 1-4534, and sequences ABN75054-
ABN79587 represent cDNAs encoding them. The invention also encompasses
CC ABN79587 represent cDNAs encoding them. The invention also encompasses
CC DAN79587 represent cDNAs encoding them. The invention also encompasses
CC referred to as ORFX) proteins, polymuclecides at least 85% identical to
the ORFX nucleic acid sequences, vectors and host cells comprising ORFX
CC referred for or RFX proteins, methods of detecting ORFX proteins, antibodies
CC polymuclectides, the recombinant production of ORFX proteins, antibodies
CC polymuclectides and sequences, vectors and host cells proliferation to an cativity, and methods of screening for modulators of ORFX expression or
CC activity, and methods of screening for modulators of ORFX expression or
CC activity, and methods of screening individuals for a predisposition to and
CORFX-associated disorder. The ORFX proteins of the invention have a wide
CC call differentiation, immune modulation, hadmatoplosition activity, chemotraciny, and antifferentiation, indimatery activity, thrombolytic activity,
CC chemokinetic activity, haemostatic activity, thrombolytic activity,
CC chemokinetic activity, haemostatic activity, thrombolytic activity,
CC chemokinetic activity, haemostatic activity, thrombolytic activity,
CC chemokinetic activity, and may also be involved in the determination
CC bodily characteristics, fertility and behaviour. ORRX proteins,
CC characteristics, fertility and behaviour. ORRX proteins,
CC corgan transplantation, disorders such as epicias and hamben and activity and antibodies may he used in the treatment of cancers
CC cross transcripte, in the identification and disorders disease, and infectious diseases caused by viral, bacterial,
CC source of primers and probes, in the detection of ORRX genomic sequences
CC source of primers and probes, in the detection of ORRX genomic sequences, in generic diagnosis, and indentication and i
                 hypothyroidism; cholesterol ester storage disease; infection; vulnerary; vasotropic; antipsoriatic; antidiabetic; cytostatic; nootropic; neuroprotective; antienterosclerotic; anticoaquiant; thrombolytic; cardiant; hypotensive; antithyroid; antiinflammatory; immunomodulator; dermatological; analgesic; virucide; antibacterial; fungicide; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel human polypeptides and polymucleotides useful for diagnosing, preventing and treating cardiovascular disease, neurodegenerative, hyperproliferative disorders and disorders related to organ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 278 BP; 73 A; 74 C; 79 G; 52 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 1253; 2508pp; English.
                                                                                                                                                                                                                                                                                                              24-MAY-2001; 2001WO-US017076.
                                                                                                                                                                                                                                                                                                                                                           24-MAY-2000; 2000US-0206690P
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Leach MD, Shimkets RA;
                                                                                                                                                                                                                                                                                                                                                                                                        (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-106200/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P-PSDB; ABP33020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        transplantation
                                                                                                                                                                                                               WO200190366-A2.
                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                              29-NOV-2001.
```

Systemic inflammatory response syndrome; SIRS; antibacterial; immunosuppressive; antiinflammatory; diagnosis; sepsis; ds.

Human SIRS/sepsis diagnostic marker DNA fragment 3886.

(first entry)

02-JUN-2005

윱

```
The invention comprises DNA sequences which are associated with intestinal epithelium and peyer's patch M cells. The DNA sequences of the invention are useful for assessing, moditying, moditying, redulating or regulating intestinal epithelium or M cell development. The DNA sequences of the invention are also useful in the treatment of: inflammatory bowel disease, glutenenteropathy, infectious diseases, autoimmune diseases disease, multiple sclerosis, allergy, asthma and diabetic mellitus), diseases or disorders of the immune system, hypersensitivity, anaphylaxis, and blood group incompatibility. The present nucleic acid represents an intestinal epithelium/peyer's patch M cell-associated DNA sequence of the invention. NOTE: The present sequence is not shown in the
                                                                                                                                                                                                                                                 intestinal epithelium cell development; peyer's patch M cell development; inflammatory bowel disease; glutenenteropathy; infectious disease; autoimmune disease; haemolytic anaemia; rheumatoid arthritis; dermatitis; Grave's disease; multiple sclerosis; allergy; asthma; diabetic mellitus; immune system disorder; hypersensitivity; anaphylaxis; blood group incompatibility; ds; mouse; murine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel isolated or purified polypeptide encoded by genes associated with intestinal epithelium or M cell development, differentiation or function, useful for treating autoimmune diseases and infectious diseases.
                                                                                                                                                                                                                  Intestinal epithelium/peyer's patch M cell-associated DNA sequence #72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lo DD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  specification, but has been retrieved from the WIPO website.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 18; DB 10; Length 309;
Pred. No. 95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mah SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 309 BP; 98 A; 62 C; 69 G; 80 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  O'mahony DJ, Evans CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 221; 152pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.8%; Sco.
100.0%; Pre
126 GCAGTACCAGCTTCTGCA 109
                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-APR-2002; 2002WO-US010873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-APR-2001; 2001US-0281416P
                                                                                                             ADL24711 standard; DNA; 309
                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Byrne D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-075470/07.
                                                                                                                                                                                                                                                                                                                                                                                                                     WO200280852-A2
                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ,
S
                                                                                                                                                                                  20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-0CT-2002
                                                                                                                                               ADL24711;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Brayden
                                                                         RESULT 9
                                                                                                ADL2471
```

In vitro detection of systemic inflammatory response syndrome and related conditions, for e.g. monitoring progression, comprises detecting abnormal expression of disease-related genes.

Disclosure; Page; 75pp; German.

Deigner

Saluz H, Straube E, Zipfel PF,

Reinhart K,

Russwurm S,

WPI; 2004-748070/73.

(SIRS-) SIRS LAB GMBH.

02-APR-2003; 2003DE-01015031. 08-AUG-2003; 2003DE-01036511.

31-MAR-2004; 2004WO-EP003419

WO2004087949-A2 Homo sapiens

14-OCT-2004.

```
The invention relates to a novel method for in vitro detection of systemic inflammatory response syndrome (SIRS). The method comprises detecting abnormal expression of diseaser-related genes, or their associated peptides. The method of the invention demonstrates antibacterial, immunosuppressive and antiinflammatory applications and can used for early differential dispossis, monitoring progression, assessing risk, assessing the likely response to treatment and for post mortem dispossis of systemic inflammatory response syndrome, sepsis and sepsis-like conditions. The recombinant or synthetic nucleic acid sequences of the invention, or derived proteins or peptides, may be useful as calibrants in assays for the specified diseases, for evaluating cr activity or toxicity in screening for active apents and/or for preparation of agents for treatment or prevention of the specified diseases. The current sequence is that of a human SIRS/sepsis dispossic patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp, wipo.int/published contraction format directly from WIPO at ftp, wipo.int/published disposed within the specification, however, these have not been taken into account during indexing due to inconsistencies in application and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.8%; Score 18; DB 13; Length 459;
100.0%; Pred. No. 94;
lve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 459 BP; 145 A; 82 C; 87 G; 145 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.5°,
100.0%; Pre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            327 GTAATGATGTTTTCTT 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gradicarcriricarica 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABV46132 standard; cDNA; 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-SEP-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 100.
hes 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABV46132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABV46132/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HXXXEX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
```

ö

Gaps

ö

0; Indels

Mismatches

43 TTCAGGAGGCAGGGCAG 60

86

69 TTCAGGAGGCAGGGCAG

ઠે 셤

Local Similarity 100.

Matches

ACF85026 standard; DNA; 459 BP

RESULT 10 ACF85026 ID ACF8 XX AC ACF8

ACF85026;

```
9905-0134219P

9905-013421P

9905-0134941P

9905-0134941P

9905-0135224P

9905-013523P

9905-013523P

9905-013523P

9905-013523P

9905-0136782P

9905-0137522P

9905-0137528P

9905-0137528P

9905-0137528P

9905-0137528P

9905-0137528P

9905-0139453P

9905-0139453P

9905-0139455P

9905-0139455P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       990S-0139459P.
990S-0139460P.
990S-0139461P.
990S-0139462P.
                                                                                                                                                                                                                             99US-0132048P.
99US-0132407P.
99US-0132484P.
99US-0132485P.
                                                                                                                                                                                                                                                                        99US-0132486P.
99US-0132487P.
99US-0132863P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-0139750P.
99US-0139763P.
99US-0139817P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0140353P.
99US-0140354P.
99US-0140695P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-0141287P.
99US-0141842P.
99US-0142154P.
                                                                                                               99US-0126785P
                                                                                                                                                                                            99US-0130510P
                                                                                                                                                                                                                                                                                                         99US-0134256P.
                                   25-FEB-2000; 2000EP-00301439
                                                                    99US-0123180P
99US-0123548P
                                                                                          99US-0125788P
                                                                                                                                       99US-0128234P
                                                                                                                                                           99US-0129845P
                                                                                                                                                                                 99US-0130449P
                                                                                                                                                                                                                  99US-0131449P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0139899P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-0140823P
                                                                                        23-MAR-1999;
25-MAR-1999;
29-MAR-1999;
01-APR-1999;
06-APR-1999;
16-APR-1999;
                                                                                                                                                                                                                  28-APR-1999;
30-APR-1999;
30-APR-1999;
                                                                                                                                                                                                                                                   04-MAY-1999;
05-MAY-1999;
06-MAY-1999;
06-MAY-1999;
                                                                                                                                                                                                                                                                                                                                14-MAY-1999;
14-MAY-1999;
14-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-JUN-1999;
16-JUN-1999;
16-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-1999;
18-JUN-1999;
18-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                   27-MAY-1999;
28-MAY-1999;
                                                                                                                                                                                            23-APR-1999
23-APR-1999
                                                                                                                                                                                                                                                                                                                                                                              19-MAY-1999,
20-MAY-1999,
                                                                                                                                                                                                                                                                                                                                                                                                             24-MAY-1999;
25-MAY-1999;
               06-SEP-2000
                                                                                                                                                                                                                                                                                                07-MAY-1999
11-MAY-1999
                                                                                                                                                                                                                                                                                                                      14-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                 18-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                    21-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-JUN-1999
04-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .8-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-JUN-1999
   \mathbf{X}
                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a their compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (i) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                      Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker; pharmacogenomic marker; gene; ss.
                                                                                                                                                                                                                                                                                          Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hybridisation assay; genetic mapping; gene expression control; protein identification; signal transduction pathway; metabolic pathway; promoter; termination sequence; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.8%; Score 18; DB 5; Length 465; 00.0%; Pred. No. 94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 465 BP; 161 A; 79 C; 82 G; 143 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Arabidopsis thaliana DNA fragment SEQ ID NO: 9835.
Human prostate expression marker cDNA 46123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                           (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC
                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 9110-9111; 11750pp; English
                                                                                                                                                                                                                                                  Monahan JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               185 GAGTTGTTTATATTTC 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGTTGTTTATATATTC 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC35341 standard; DNA; 565 BP.
                                                                                                                                                       16-MAR-2000; 2000US-0189862P.
25-MAY-2000; 2000US-0207454P.
09-UUN-2000; 2000US-021314P.
18-UUL-2000; 2000US-0219007P.
13-DEC-2000; 2000US-0255281P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                              2000US-0183319P
                                                                                                                        20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-OCT-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.8°
Best Local Similarity 100.'
Matches 18; Conservative
                                                                                                                                                                                                                                                Schlegel R, Endege WO,
                                                                                                                                                                                                                                                                      WPI; 2001-662795/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Arabidopsis thaliana
                                                                            WO200160860-A2
                                                       Homo sapiens
                                                                                                                                              17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EP1033405-A2
                                                                                                 23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAC35341;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAC35341/c
ID AAC353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 12
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
```

```
RR 02-JUL-1999; 9918-014205E.
RR 13-JUL-1999; 9918-014200E.
RR 13-JUL-1999; 9918-014220E.
RR 13-JUL-1999; 9918-014237P.
RR 13-JUL-1999; 9918-014237P.
RR 15-JUL-1999; 9918-014432E.
RR 15-JUL-1999; 9918-014432E.
RR 15-JUL-1999; 9918-014432E.
RR 15-JUL-1999; 9918-014432E.
RR 19-JUL-1999; 9918-014433E.
RR 19-JUL-1999; 9918-014433E.
RR 20-JUL-1999; 9918-014433E.
RR 21-JUL-1999; 9918-014432E.
RR 21-JUL-1999; 9918-014532E.
RR 21-JUL-1999; 9918-014332E.
RR 21-JUL-1999; 9918-014332E.
RR 21-JUL-1999; 9918-014932E.
RR 21-
```

```
Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 565;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ss; gene; plant; transgenic plant; crop improvement; abiotic stress tolerance; plant growth regulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Match
Local Similarity 100.0%; Pred. No. 94;
es 18; Conservative 0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lead_CeresClone cDNA SEQ ID NO:1901.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTTTTTGAGTTCTTCAA 414
9908-0155139P.
9908-0155468P.
9908-0155658P.
9908-0155658P.
9908-0157137B.
9908-0157137B.
9908-0157339P.
9908-0159234P.
9908-0159234P.
9908-0159234P.
9908-0159234P.
9908-0159234P.
9908-0159234P.
9908-0159234P.
9908-0159234P.
9908-0159234P.
9908-015931P.
9908-0160764P.
 22-SEP-1999;
24-SEP-1999;
28-SEP-1999;
26-CEP-1999;
26-CCT-1999;
36-CCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      57
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  요
```

Gaps ö DB 15; Length 565; 94; Sequence 565 BP; 210 A; 99 C; 108 G; 148 T; 0 U; 0 Other; 0; Indels Best Local Similarity 100.0%; Pred. No. 94; Matches 18; Conservative 0; Mismatches .8%; Score 18; Query Match

ઠ

AAH12181 standard; cDNA; 575 BP AAH12181; RESULT 14 AAH12181/c 

Human cDNA clone (3'-primer) SEQ ID NO:9016.

26-JUN-2001 (first entry)

Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss. Primer sets for synthesizing polynucleotides, particularly the 5602 full-length cDNAs defined in the specification, and for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length 27-AUG-1999; 99JP-00300253. 11-JAN-2000; 2000JP-00118776. 02-MAY-2000; 2000JP-00183767. 28-JUL-2000; 2000EP-00116126 09-JUN-2000; 2000JP-00241899 (HELI-) HELIX RES INST. WPI; 2001-318749/34. Isogai T, Homo sapiens. EP1074617-A2 29-JUL-1999; 07-FEB-2001. Ishii S, Ota T, The phenotypes and characteristics, comprising a nuclectide sequence that phenotypes and characteristics, comprising a nuclectide sequence that the encodes an amino acid sequence exhibiting at least 85% sequence that checked an amino acid sequence acid, which is a complement of cidentity to an amino acid sequence in nuclectide sequence in cortholog alignments of Figure 1, a nucleic acid, which is a complement of (a), a nucleic acid, which is the reverse of the nucleotide sequence in (a) (such that the reverse muclecides of the nucleotide sequence order which is the reverse of the sequence order of (a)) or a nucleic acid duplex at a temperature of 40-48 degrees C below the melting cenderature of the nucleic acid duplex. Also included are a vector construct (comprising a first nucleic acid having a regulatory sequence of the nucleic acid molecule), a host cell comprising the isolated nucleic acid molecule), a host cell comprising an amino acid nucleic acid molecule), a host cell comprising an amino acid sequence exhibiting a nucleic acid nucleic acid into a host cell comprising the nucleic acid molecule, a not seed nucleic acid into a host cell comprising the nucleic acid molecule, a plant generated from the plant comprising an isolated nucleic acid into a host cell, transforming a host cell or seed, a plant (plant cell), plant material or seed) comprising the nucleic acid molecule, a plant generated from the plant cell or seed, a plant (plant cell), plant material or seed or operation of a plant plant with the nucleic acid molecule or acid molecule where the plant with the nucleic acid molecule or acid molecule acid into a plant promoers of that the component is acid molecule, a plant with the nucleic acid molecule where the plant with the nucleic acid molecule where the plant with the nucleic acid molecule acid molecul The invention relates to an isolated nucleic acid molecule modifying New isolated nucleic acid molecule modifying plant phenotypes and characteristics and the polypeptide it encodes, useful for making transgenic plants with improved characteristics. Feldmann K; Claim 2; SEQ ID NO 1901; 612pp; English. Alexandrov N, Brover V, Mascia P, of the invention. 2006-090599/09. (CERE-) CERES INC. P-PSDB; AEF29702

Saito K, Yamamoto J; , Otsuki T;

ogai T, Nishikawa T, Hayashi K, S Sugiyama T, Wakamatsu A, Nagai K,

The present invention describes primer sets for synthesising 5602 fulllength CDNAs defined in the specification. Where a primer set comprises:

(a) an oligo-dr primer and an oligonucleotide comprisentary to the
complementary strand of a polynucleotide which comprises one of the 5602
nucleotide sequences defined in the specification, where the
complementary strand of a polynucleotide which comprises a 5'-end
complementary strand of a polynucleotide which comprises a 5'-end
complementary strand of a polynucleotide which comprises a 5'-end
complementary strand of a polynucleotide which comprises a 5'-end
complementary strand of a polynucleotide which comprises a 5'-end
complementary strand of a polynucleotide which comprises a 1'-end sequence, where the
complementary strand of sequence is selected from those defined in the
complementary the primer sets as 1'-end sequence, where the
coligonucleotide which comprises a 1'-end sequence, where the
coligonucleotide whill-length comprises a sequence of sequence is selected from those defined in the
comprise at least 15 nucleotides and the combination of
coligonucleotide whill-length compassion of the primers are also useful for the
complementary full-length cDNAs. The primers are also useful for the
coligonucleotide and specialised methods. AAH01166 to AAH13628 and
AAH13633 to AAH13632 represent human and acid sequences; and AAH13632 represent
coligonucleotides. all of which are used in the exemplification of the Claim 3; SEQ ID NO 9016; 2537pp + Sequence Listing; English. present invention

ö Score 18; DB 4; Length 575; Pred. No. 94; 0; Mismatches 0; Indels Sequence 575 BP; 184 A; 104 C; 124 G; 155 T; 0 U; 8 Other; 3.5., 100.0%; Fr. 18, Conservative Query Match Best Local Similarity Matches

ö

Gaps

ઠે 셤

ö

AAA70256 standard; DNA; 675 07-NOV-2000 (first entry) AAA70256;

SARREX

RESULT 15 AAA70256

```
The present invention describes proteins and their fragments (I) encoded by chromosome 2 of the human malarial parasite, Plasmodium falciparum. By chromosome 2 of the human malarial parasite, Plasmodium falciparum. CC Also described are: (1) nucleotide sequences (II) encoding (II); and (II); (II) and caccines against P. falciparum infection comprising (I) or (III); (I) and infection. (I) and polyclonal antisera or a monoclonal antibody raised to infection with P. falciparum. Furthermore. (I) (especially when they or infection with P. falciparum. Furthermore, (I) (especially when they or are rifins or secreted or membrane proteins) can aid the identification of drugs to treat or prevent P. falciparum infection, or they can be used to drugs to treat or prevent P. falciparum infection, or they can be used to drugs to treat or prevent P. falciparum infection, or they can be used to a process hampered by the complexity of the parasitic lifection of proteins concoded by it will help to expand our understanding of parasite biology, encoded by it will help to expand our understanding of parasite biology, concoded by it many parts of the world, and they parasite resistance to drugs and mosquito resistance to insecticides have led to a resurgence to drugs and mosquito resistance to insecticides have led to a resurgence of malaria in many parts of the world, and there is a pressing need for expresent nucleotide and protein sequences given in the present invention, but which are not specifically mentioned within the
Plasmodium falciparum chromosome 2 related DNA sequence SEQ ID NO:389.
                                             Plasmodium falciparum; chromosome 2; human malaria parasite; vaccine; antimalarial; malaria; protozoacide; infection; insecticide; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Proteins encoded by chromosome 2 of the human malarial parasite, plasmodium falciparum, useful as antimalarial vaccines and in the diagnosis of P.falciparum infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.8%; Score 18; DB 3; Length 675; 00.0%; Pred. No. 94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 675 BP; 300 A; 71 C; 91 G; 213 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gardner M, Venter JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 3.8%; Score 18; DB
Best Local Similarity 100.0%; Pred. No. 94;
Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 564; 577pp; English.
                                                                                                                                                                                                                                                           99WO-US026796.
                                                                                                                                                                                                                                                                                                           98US-0107131P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hoffman S, Carucci D,
                                                                                                                         Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                                 (HOFF/) HOFFMAN S.
(CARU/) CARUCCI D.
(GARD/) GARDNER M.
(VENI/) VENTER J C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-365347/31
                                                                                                                                                                   WO200025728-A2.
                                                                                                                                                                                                                                                                                                           05-NOV-1998;
                                                                                                                                                                                                                                                                35-NOV-1999;
                                                                                                                                                                                                                11-MAY-2000
```

2 GAAAATAAATGGAACACA 19 ઠ

ô

Gaps

ö

0; Indels

Search completed: November 3, 2006, 20:46:05 Job time: 279.593 secs

OM nucleic

Run on:

```
Continuation (16 o
Cr030674 Platynere
AC113992 Mus muscu
AC147086 Pan trogl
AC146051 Pan trogl
AL139378 Human DNA
AL139378 Human DNA
AC108759 Homo sapi
AC012221 Homo sapi
AC015822 Homo sapi
AC16585 Bos tauru
CR759846 Danio rer
AC015882 Homo sapi
AC153211 Bos tauru
AC153211 Bos tauru
AC163323 Bos tauru
AC163323 Bos tauru
AC163323 Bos tauru
AC163329 Bos tauru
AC16339 Bos tauru
AC16339 Bos tauru
AC16339 Bos tauru
AC16339 Bos tauru
AC18989 Bos tauru
AC16339 Bos tauru
AC183987 Bos tauru
AC183987 Bos tauru
AC183987 Bos tauru
AC13364 Medicago
AC13364 Pon trogl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AF373206 1991 bp DNA linear BCT 22-JUL-2005 Escherichia coli strain MBU. E 412 cytolethal distending toxin B (cdtB) gene, complete cds; and unknown genes.
AF373206.4 GI:49912092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E 2 (bases 1 to 1991)
S Bouzari,S., Olcomi,M. and Zarepoor,M.
Direct Submisser
L Submitted (22-ARR-2001) Molecular Biology, Institute Pasteur of
Iran, Pasteur Ave., Tehran 13164, Iran
S (bases 1 to 1991)
S Bouzari,S., Olcomi,M. and Zarepoor,M.
Direct Submission
L Submitted (14-UUN-2004) Molecular Biology, Institute Pasteur of
Iran, Pasteur Ave., Tehran 13164, Iran
Sequence update by submitter
E 4 (bases 1 to 1991)
S Bouzari,S., Olcomi,M. and Zarepoor,M.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae; Escherichia.

Enterobacteriaceae; Escherichia.

E (bases 1 to 1991)

Bouzari, S., Oloomi, M. and Oswald, E.

Detection of the cytolethal distending toxin locus cdtB among diarrheagenic Escherichia coli isolates from humans in Iran
Res. Microbiol. 156 (2), 137-144 (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (24-JIN-2004) Molecular Biology, Institute Pasteur of Iran, Pasteur Ave., Tehran 13164, Iran Sequence update by submitter 5 (bases 1 to 1991) Bouzari,S., Oloomi,M. and Zarepoor,M. Direct Submitted (07-JUL-2004) Molecular Biology, Institute Pasteur of Sequence update by submitter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                       SAU418605
AJ639873
BX649362
                    CT030674
AC113992
AC147086
AC146051
AL139378
AC108709
AC012221
AC110248
                                                                                                                                                                                                AC161965
CR759846
AC015882
AC165857
                                                                                                                                                                                                                                                                                     AC153211
AC153211
AC157305
AC163323
AC1669320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AC173964
AC101370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AC135849
T1N6
                                                                                                                                                                                                222222222222222
                      136072
146770
154679
157886
166703
179223
                                                                                                                                                                                                                                         233498
242358
243957
244813
                                                                                                                                                                                                                                                                                                                                                  258016
271832
304610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                16922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Escherichia coli
Escherichia coli
                                                                                                                                                                              206915
                                                                                                                                                                                                207977
                                                                                                                                                                                                                         216816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     70385
    LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1
AF373206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REMARK
    υU
                                                                                                                                                                                                                                                                                                                                                     0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AF373206 Escherich

U03293 Escherich

AY351906 Escherich

AY351907 Escherich

AY426341 Escherich

AY426340 Escherich

AY426340 Escherich

AY42631 Escherich

AY42631 Escherich

AY57829 Escherich

AY57829 Escherich

AY57829 Escherich

AY578329 Escherich

AY578329 Escherich

Excherich

Excherich

Excherich

Excherich

AY57839 Escherich

Excherich

Excherich

Excherich

Excherich

Excherich

AY57839 Escherich

Excherich

Excheric
                                                                                                                                           November 3, 2006, 20:46:30; Search time 2594.63 Seconds (without alignments) 11534.376 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                1 tgaaaataaatggaacacac......tggatgattgcaggagattt 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12730834
                      5.1.9
Biocceleration Ltd.
                                                                                                                                                                                                                                                                                                                                                                                            residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                    GenCore version (c) 1993 - 2006
                                                                                                         sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BCCDTABC
AY351905
AY351905
AY351907
AY376341
AY476341
AY476340
AY140193
AY578329
AY162217
BX465849
AY162217
AY162217
BX465849
AY162217
AY162217
AY162217
BX465849
AY162217
AY1
                                                                                                                                                                                                                                                                                                                                                                                            6366136 segs, 31973710525
                                                                                                                                                                                                                                                                                                                           OLIGO_NUC
Gapop_60.0 , Gapext 60.0
                                                                                                       nucleic search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Listing first 45
                                                                                                                                                                                                                                    US-10-764-316-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9b_env:*
9b_pat:*
9b_pi:*
9b_pi:*
9b_or:*
9b_en:*
9b_vi:*
9b_vi:*
9b_in:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           417
136195
141587
191669
238377
36255
59281
83102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             495
822
10241
                                      Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenEmb1:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    000000000000000004444444

00000044000000444444

000777744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75:
77:
70:
10:
                                                                                                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
```

Database :

Result No.

υυ

Word size

Searched:

Sequence:

```
/procein_id="AAD10621.1"
/brocein_id="AAD10621.1"
/brocein_id="MDKKLIAFLTUTTGCSNGTGDSPSPPGKNVELVGTPGGGTAV
/translation="MDKKLIAFLTUTTGCSNGTGDSPSPPGKNVELVGTPGGGTAV
TSNGATPTGANNTEPPEST INSTGARALTIWARPVRNUMGYTPPDSVNFGENRWN
TVGKDAGTVKFVNVAQGTCMEAFKNGVIHYTCDDNSLSQEFQLLESTNGNVLIRSSA
LQTCIRADYLSRTLESPAFTITLEKCPGAKEETQEMLWAISPPVRAAKPNLIKPELR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'experiment="experimental evidence, no additional details
                                                                                                                                                                                                                                                                                 ECCDTABC 29-JAN-1999
Escherichia coli E6468/62 (086:H34) cytolethal distending toxin (cdta, cdtB, cdtC) genes, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          experiment="experimental evidence, no additional details
                                         CGACCGATCATCGGCATTAGAATTGGTAATGATGTTTTCTTCTCAACCCATGCATTGGCG 1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bacteria, Proteobacteria, Gammaproteobacteria, Enterobacteriales, Enterobacteriaceae, Escherichia.

1 (bases 1 to 2305)
Scott, D.A. and Kaper, J.B.
Cloning and Sequencing Of the genes encoding Escherichia coli cytolethal distending toxin
Infect. Immun. 62 (1), 244-251 (1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Direct Submission
Submitted (09-NOV-1993) Scott D.A., University of Maryland School
Submitted (09-NOV-1993) Scott D.A., Center for Vaccine Dev., 10 South
of Medicine, Geographic Med., Center for Vaccine Dev., 10 South
Pine Street, Baltimore, MD 21201, USA
Location/Qualifiers
                                                                                                                                 /organism="Escherichia coli"
/mol_type="genomic DNA"
/strain="E6468(62 (086:H34)"
/specific host="Homo sapiens"
/db xref="taxon:562"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="GTG start codon"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             codon_start=1
transl_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product="CdtB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           recorded"
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201. .914
/gene="cdtA"
201. .914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="cdtB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene="cdtB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="cdtA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 2305)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .914
                                                                                                                                                                                                                                                                                                                                                                                     U03293.1 GI:416213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          recorded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     trans]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .2305
                                                                                                                                                                                                                                                                                                                                                                                                                                      Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scott, D.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8262635
                       1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene
                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                               RESULT 2
ECCDTABC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                           g
                                                                                                   쇰
                                                                                                                                                    ò
                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGACCGATCATCGGCATTAGAATTGGTAATGATGTTTTCTTCTCAACCCATGCATTGGCG 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /protein_id="AAT68871.1"
/db_xref="G1:49912094"
/db_xref="G1:49912094"
/fb_xref="G1:49912094"
/fb_xref="G1:49912094"
/db_xref="G1:49912094"
/db_xref="G1:4991209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTGITICAAACAGAAGAGCIGAIGAGGGGAGTIGIATIACCICCCAACIGITGIAICA 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGATGGTTCAGGAGGAGGAGGAGTACCAGCTTGTGCAACGTTGACTGAGGGAGAATTT 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 AGCACTCCTGGTATTCCGATGAATATATCTGGAATACCGGAACCAATAGTCGCCCA 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             182 CAGGAGITGITTATATATITCTCACGIGITGATGCATTCGCTAACAGAGIAAATCTTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAAATAAATGGAACACATGTCCGACAACTTGTTACGGGAAGTGGTGCTGTTGATATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                              2004 this sequence version replaced gi:49175456 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99.8%; Score 467; DB 15; Length 1991;
100.0%; Pred. No. 1.5e-291;
ive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product="cytolethal distending toxin B"
protein id="AAM21324.3"
db_xref="GI:49175457"
                                                                                                      coli"
                                                                                                                                                                                                                                                                                               /protein_id="AAT65834.2"
/db_xref="GI:49912093"
                                                                                                   organism="Escherichia ("organism="escherichia (mol type="genomic DNA" (strain="MBU. E 412"
                                                                                                                                                                    db_xref="taxon:562"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/transl_table=11
/product="unknown"
                                                                                                                                                                                                                                     /codon_start=1
/transl_table=11
/product="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /2. .1493
/gene="cdtB"
/note="cdtB"
/codon start=1
/transl_tah'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1490. .>1991
/note="ORF C"
                                                                                                                                                                                                                                                                                                                                                                                                                                                        672. .1493
/gene="cdtB"
672. .1493
                                                                                                                                                                                                              note="ORF A"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                        JGMEGV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
les 467; Conserv
                                            7,
                                              Jul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loc
Matches
                                                                                          вописе
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
                                                COMMENT
                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
```

```
Association of Cytolethal Distending Toxin Locus cdtB with Enteropathogenic Escherichia coli Isolated from Patients with Acute Joiarrhea in Calcutta, India J. Clin. Microbiol. 41 (11), 5277-5281 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /product="cytolethal distending toxin"
/protein id="AAQ57596.1"
/db_xref="cq1:34101011"
/translation="ENKWITHVRQLVTGSGAVDILMVQEAGAVPASATLTEREFSTPG
IPMNEYIWNTCTNSRFDELFITFSRVDAFANRVNIAIVSNRRADEVIVLPPPTVVSRP
IIGIRIGNDVPFSTHALANRGVDSGAIVNSVFEFFNRQTDPIRQAANWMIAG"
                                                                                                                                                                                                                                                                                           Cholera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BCT 07-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 AGCACTCCTGGTATTCCGATGAATGAGTATATCTGGAATACCGGAACCAATAGTCGCCA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                        [Dases 1 to 462]
Pandey,M., Khan,A., Das,S.C., Sarkar,B., Kahali,S., Chakraborty,S., Chattopadhyay,S., Yamasaki,S., Takeda,Y., Nair,G.B. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGATGGTTCAGGAGGCAGGGGCAGTACCAGCTTCTGCAACGTTGACTGAGCGAGAATT 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCACTCCTGGTATTCCGATGAATGAGTATATCTGGAATACCGGAACCAATAGTCGCCCA 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 ATTGTTTCAAACAGAAGAGCTGATGAGGGTGATTGTATTACCTCCTCCAACTGTTGTATCA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATCGGGGCGTGGATTCAGGAGCAATTGTAAATAGTGTTTTTTGAGTTCTTCAACAGACAA 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 CTGATGGTTCAGGAGGCAGGGCAGTACCAGCTTCTGCAACGTTGACTGAGCGAGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 CAGGAGTIGITTATATATATTCTCACGTGTTGATGCATTCGCTAACAGAGTAAATCTTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAAATAAATGGAACACACATGTCCGACAACTTGTTACGGGAAGTGGTGCTGTTGATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAAATAAATGGAACACACATGTCCGACAACTTGTTACGGGAAGTGGTGCTGTTGATATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGGAGTTGTTTATATATTTCTCACGTGTTGATGCATTCGCTAACAGAGTAAATCTTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242 ATTGTTTCAAACAGAAGGCTGATGAGGTGATTGTATTACCTCCTCCAACTGTTGTATCA
                                                                                                                                                                                                                                                                                        National Institute of C)
Scheme, XM, Beliaghata,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 462;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 98.7%; Score 462; DB 15; L
Best Local Similarity 100.0%; Pred. No. 2.5e-288;
Matches 462; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                            Direct Submission
Submitted (23-JUL-2003) Microbiology,
and Enteric Diseases, P-33, CIT Road,
Calcutta, West Bengal 700010, India
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                    coli"
                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Escherichia c
/mol_type="genomic DNA"
/strain="VTE1456"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db_xref="taxon:562"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <1. .>462
/gene="cdtB"
/codon start=1
/transl_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /gene="cdtB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <1. .>462
                                                                                                                                                                                                                                       Ramamurthy, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AY351906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    182
                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                                                           JOURNAL
                                                                                                                                   PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
AY351906
LOCUS
                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDS
                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                         recorded | Codon start=1 | Cod
                     FSRVDAFANRVNLAIVSNRRADEVIVLPPPTVVSRPIIGIRIGNDVFFSTHALANRGV
DSGAIVNSVPEFPNRQTDPIRQAANRMIAGDFNRSPATLFSTLEPGIRNHVNIIAPPD
PTQASGGVLDYAVVGNSVSFVLPLLRASLLFGLLRGQIASDHPPVGFIPGRGARR"
1729. . .2301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BCT 07-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae; Escherichia.

I (bases 1 to 462)
Pandey,M., Khan,A., Das,S.C., Sarkar,B., Kahali,S., Chakraborty,S., Chatcopadhyay,S., Yamasaki,S., Takeda,Y., Nair,G.B. and Ramamurthy,T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 462 bp DNA linear BCT 07-NOV-200 Escherichia coli strain VTE1456 cytolethal distending toxin (cdtB) AY351905.1 GI:34101070
                                                                                                                                                                                                          /experiment="experimental evidence, no additional details
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGATGGTTCAGGAGGCAGGAGCAGTACCAGCTTCTGCAACGTTGACTGAGCGAGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCACTCCTGGTATTCCGATGAATGAGTATATCTGGAATACCGGAACCAATAGTCGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGGAGTTGTTTATATATTCTCACGTGTTGATGCATTCGCTAACAGAGTAAATCTTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTGTTTCAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCCAACTGTTGTATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTGTTTCAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCCAACTGTTGTATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGACCGATCATCGGCATTAGAATTGGTAATGATGATCTTTTCTTCTCAACCCATGCATTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ceaccearcarcescarragaarregraarearcrrrrrrrrrcrcaaccearecarreges
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATCGGGGCGTGGATTCAGGAGCAATTGTAAATAGTGTTTTTTGAGTTCTTCAACAGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGATGGTTCAGGAGGCAGGAGGAGTACCAGCTTCTGCAACGTTGACTGAGCGAGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCACTCCTGGTATTCCGATGAATGAGTATATCTGGAATACCGGAACCAATAGTCGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAAATAAATGGAACACATGTCCGACAACTTGTTACGGGAAGTGGTGCTGTTGATATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACGGATCCTATAAGACAGGCCGCTAACTGGATGATTGCAGAGATTT 1485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99.8%; Score 467; DB 15; Length 2305; 100.0%; Pred. No. 1.5e-291; ive 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACGGATCCTATAAGACAGGCCGCTAACTGGATGATTGCAGGAGATTT
                                                                                              /gene="cdtC"
1729.
                                                                                                                                                        1729. .2301
/gene="cdtC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 100.
Matches 467; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Escherichia coli
Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                         gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 3
AY351905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                     CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
```

8 윰 ઠે 셤 셤

ሯ

유

ઠે

셤

ઠે

셤

ð

셤

ሯ

셤

ઠ

```
agcactcctggtaftccgatgaatgagtatatctcgaataccggaaccaatagtcgccca 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db_xref="taxon:562"
                                                                                                                                                                                                                          AY351907.1 GI:34101074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="cdtB"
<1. .>462
/gene="cdtB"
                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 462)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
Matches 462; Conservative
                                                                                                                                                                                                                                                    Escherichia coli
Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene
                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                              PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDS
                                                                                                                                                 RESULT 5
AY351907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Association of Cytolethal Distending Toxin Locus cdtB with Enteropathogenic Escherichia coli Isolated from Patients with Acute Diarrhea in Calcutta, India J. Clin. Microbiol. 41 (11), 5277-5281 (2003)
                                                                                                                                                                                                                                                       Jacolstes

2 (bases 1 to 462)

Pandey, M., Khan, A., Das, S.C., Sarkar, B., Kahali, S., Chakraborty, S.,

Chatropadhyay, S., Yamasaki, S., Takeda, Y., Nair, G.B. and

Ramamurthy, T.

Direct Submission

Submitted (24-JUL-2003) Microbiology, National Institute of Cholera

and Enteric Diseases, P-33, CIT Road, Scheme, XM, Beliaghata,

Calcutta, West Bengal 700010, India
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 CTGATGGTTCAGGAGGCAGGGGCAGTACCAGCTTCTGCAACGTTGACTGAGCGAGAATTT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTGTTTCAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCCAACTGTTGTATCA 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                    Pandey, M., Khan, A., Das, S.C., Sarkar, B., Kahali, S., Chakraborty, S. Chattopadhyay, S., Yamasaki, S., Takeda, Y., Nair, G.B. and Ramamurthy, T.
                                                                                                      Bacteria; Protecobacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Escherichia.
1 (bases 1 to 462)
Escherichia coli strain GB1807 cytolethal distending toxin (cdtB)
gene, partial cds.
AY351906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGAGTTGTTTATATATTTCTCACGTGTTGATGCATTCGCTAACAGAGTAAATCTTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 CTGATGGTTCAGGAGGCAGGAGGCAGTACCAGCTTCTGCAACGTTGACTGAGCGAGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122 AGCACTCCTGGTATTCCGATGAATGAGTATATCTGGAATACCGGAACCAATAGTCGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 GAAAATAAATGGAACACACATGTCCGACAACTTGTTACGGGAAGTGGTGCTGTTGATATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98.7%; Score 462; DB 15; Length 462;
.larity 100.0%; Pred. No. 2.5e-288;
Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                        /organism="Escherichia coli"
                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="genomic DNA"
/strain="GB1807"
/db_xref="taxon:562"
                                                                AY351906.1 GI:34101072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <1. .>462
/gene="cdtB"
                                                                                                                                                                                                                                                                                                                                                                                                                                            <1.<sup>7</sup>.>462
/gene="cdtB"
                                                                                                                                                                                                                                                                                                                                                                             .. .462
                                                                                         Escherichia coli
Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        al Similarity
462; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Si
Matches 462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                  Bource
                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                            DEFINITION
                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene
                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

```
/codon start=1
/transI_table=11
/transI_table=11
/product="cytoLethal distending toxin"
/protein_id="AAQ57588.1"
/db_xref="G1:34101075"
/db_xref="G1:34101075"
/translation="RENRWITHYRQLVTGSGAVDILMVQEAGAVPASATLTEREFSTPG
/translation="RENRWITHYRQLVTGSCGAVDILMVQEAGAVBASATLTEREFSTPG
/translation="RENRWITHYRQLVTGSTANNORPEPTVVSRP
IGHRIGNDVFFSTHALANRGVDSGAIVNSVFEPFRNRQTDPIRQAANWMIAG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bacteria: Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriacae; Escherichia.

Enterobacteriacae; Escherichia.

Enterobacteriacae; Escherichia.

Pandey,M., Khan,A., Das,S.C., Sarkar,B., Kahali,S., Chakraborty,S., Chatcopadhyay,S., Yamasaki,S., Takeda,Y., Nair,G.B. and Ramamutchy.T.

Association of Cytolethal Distending Toxin Locus cdtB with Enteropathogenic Bacherichia coli Isolated from Patients with Acute Diarrhea in Calcutta, India
J. Clin. Microbiol. 41 (11), 5277-5281 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                               AY351907

462 bp DNA linear BCT 07-NOV-2003
Escherichia coli strain GB1371 cytolethal distending toxin (cdtB)
gene, partial cds.
AY351907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               National Institute of Cholera
Scheme, XM, Beliaghata,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGATGGTTCAGGAGGCAGGGGCAGTACCAGCTTCTGCAACGTTGACTGAGCGAGAATTT 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pandey, M., Khan, A., Das, S.C., Sarkar, B., Kahali, S., Chakraborty, S.,
Chattopadhyay, S., Yamasaki, S., Takeda, Y., Nair, G.B. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
362 AATCGGGGCGTGGATTCAGGAGCAATTGTAAATAGTGTTTTTGAGTTCTTCAACAGACAA 421
                            2 GAAAATAAATGGGAACACACATGTCCGACAACTTGTTACGGGAAGTGGTGCTGTTGATATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 CTGATGGTTCAGGAGGAGGAGGAGTACCAGCTTCTGCAACGTTGAACTAAGCGAGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 462;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                           422 ACGGATCCTATAAGACAGGCCGCTAACTGGATGATTGCAGGA 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98.7%; Score 462; DB 15; L
100.0%; Pred. No. 2.5e-288;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
Submitted (25-JUL-2003) Microbiology,
and Enteric Diseases, P-33, CIT Road,
Calcutta, West Bengal 700010, India
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Escherichia coli"
/mol type="genomic DNA"
/strain="GB1371"
```

ö

ò

ઠે

δ 요 ò g ઠે g

```
AF373205

AF373205

Bacherichia coli strain MBU. E 322 cytolethal distending toxin B (cdtB) gene, partial cds.

AF373205
                                                                                                                                   100 CTGATGCTTCAGGAGGCAGGGCAGTACCAGCTTCTGCAACGTTGACTGAGGGAAATTT 159
                                                                                                                                                                                                                                                                          220 CAGGAGTTGTTTATATATATTTCTCACGTGTTGATGCATTCGCTAACAGAGTAAATCTTGCG 279
                                                                                                                                                                                                                                                                                                                                                  280 ATTGTTTCAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCCAACTGTTGTATCA 339
                                                                                                                                                                                                                                                                                                                                                                                                                     340 CGACCGATCATCGCATTAGAATTGGTAATGATGTTTTCTTCTCAACCCATGCATTGGCG 399
                                                                                                                                                                                  181
                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGATGGTTCAGGAGGCAGGAGCAGTACCAGCTTCTGCAACGTTGACTGAGCGAGAATTT 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          362 AATCGGGGCGTGGATTCAGGAGCAATTGTAAATAGTGTTTTTGAGTTCTTCAACAGACAA 421
                                         61
                                                                       66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Escherichia coli
Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Escherichia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15.740.7,
22 (bases 1 to 463)
Bouzari,S., Oloomi,M. and Zarepoor,M.
Direct Submission
Submitted (22-APR-2001) Molecular Biology, Institute Pasteur of
Iran, Pasteur Ave., Tehran 13164, Iran
                                                             40 GAAAATAAATGGAACACACATGTCCGACAACTTGTTACGGGAAGTGGTGCTGTTGATATC
                                                                                                                                                                                                                  160 AGCACTCCCGGTATTCCGATGAGTATATCTGGAATACCGGAACCAATAGTCGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                  302 CGACCGATCATCGCCATTAGAATTGGTAATGATGTTTTCTTCTCAACCCATGCATTGGCG
                                     2 GAAAATAAATGGAACACATGTCCGACAACTTGTTACGGGAAGTGGTGCTGTTGATATC
                                                                                                                                                                                                                                                      CAGGAGTIGTTTATATATTTCTCACGTGTTGATGCATTCGCTAACAGAGTAAATCTTGCG
                                                                                                                                                                                                                                                                                                                             242 ATTGTTTCAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCCAACTGTTGTATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 463)
Bouzari,S., Oloomi,M. and Oswald,E.
Bouzari,S., Oloomi,M. and Oswald,E.
Detection of the cytolethal distending toxin locus cdtB among diarrheagenic Escherichia coli isolates from humans in Iran 15748977
       Gaps
       ö
   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ā
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <i, .>463
/gene="cdtB"
/note="cdtB"
/codon start=1
/ransl_table=11
/product="cytolethal distending toxin
/protein_id="AAM21323.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                460 ACGGATCCTATAAGACAGGCCGCTAACTGGATGAT 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               422 ACGGATCCTATAAGACAGGCCGCTAACTGGATGAT 456
     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .463
/organism="Escherichia of /mol_type="genomic DNA" /strain="MBU. E 322"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /db_xref="taxon:562"
     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AF373205.1 GI:20385545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <1. .>463
/gene="cdtB"
   452; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Escherichia coli
                                                                                                                                                                                122
                                                                                                                                                                                                                                                      182
                                                                                                           62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
AF373205
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                       g
                                       8
                                                                                                           Š
                                                                                                                                       a
                                                                                                                                                                              ઠે
                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /product="cytolethal distending toxin B subunit"
/protein_id="AAQ93803.1"
/db_xref="G1:37575479"
/translation="VATWNLQSSNAPTENKWNTHVRQLVTGSGAVDILMVQEAGAVPA
SALTJEREFSTPGIPMNEYIWNTGTNSRPQELFIYFSRVDAFANRVNLAIVSNRRADE
VIVLPPTVVSRPIIGIRIGNDVFFSTHALANRGVDSGAIVNSVFEFFNRQTDPIRQA
ANWM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AY426341 494 bp DNA linear BCT 27-JAN-2004 Escherichia coli 3015-99 cytolethal distending toxin B subunit (cdtB) gene, partial cds.
                                                                       240
                                                                                                                          241 ATTGTTTCAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCCAACTGTTGTATCA 300
AGCACTCCTGGTATTCCGATGAATGAGTATATCTGGAATACCGGAACCAATAGTCGCCCA 180
                                     241
                                                                                                         301
                                                                                                                                                                            CGACCGATCATCGCCATTAGAATTGGTAATGATGTTTTCTTCTCAACCCATGCATTGGCG 361
                                                                                                                                                                                               362 AATCGGGCGTGGATTCAGGAGCAATTGTAAATAGTGTTTTTGAGTTCTTCAACAGACAA 421
                                                                                                                                                                                                                                                                   Bacteria, Proteobacteria, Gammaproteobacteria, Enterobacteriales, Enterobacteriaceae; Escherichia.

[Enterobacteriaceae; Escherichia.]

[Chassel 1 to 494)

Pickett, C.L., Lee, R.B., Eyigor, A., Elitzur, B., Fox, E.M. and Strockbine, N.A.

Patterns of Variations in Escherichia coli Strains That Produce Cytolethal Distending Toxin

Infect. Immun. 72 (2), 684-690 (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
Submitted (01-OCT-2003) Microbiology, Immunology, and Molecular
Genetics, University of Kentucky, 800 Rose Street, Lexington, KY
40536, USA
                                                    242 ATTGTTTCAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCCAACTGTTGTATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pickett, C.L., Lee, R.B., Byigor, A., Elitzur, B., Fox, E.M. and Strockbine, N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 302; DB 15; Length 494; Pred. No. 4.1e-184;
                                                                                                                                                                                                                                                                                                                                        ACGGATCCTATAAGACAGGCCGCTAACTGGATGATTGCAGGA 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             coli"

    .494
    /organism="Escherichia c
/mol_type="genomic DNA"
/strain="3015-99"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            db_xref="taxon:562"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .>494
/gene="cdtB"
/note="nuclease"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /codon_start=1/transl_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AY426341.1 GI:37575478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <1. . . >494
/gene="cdtB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 494)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
121
                                 182
                                                                                                                                                                            302
                                                                                                                                                                                                                                                                                                                       422
                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                  AY426341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                 셤
                                                                                                                                 윉
```

ö

159

121

66 19

279 301

219 241

181

361

DRIGIN

g

8

ద

ઠ

ద

ે

8 6

g

ઠે

셤 ò 셤

ò

```
PAT 31-MAY-2001
                                         /codon start=1
/transI_table=11
/transI_table=11
/product="cytolethal distending toxin B subunit"
/protein id="ApQ93802.1"
/db_xref="G1:37575477"
/translation="VATWNLGSNAPTENKWNTHVRQLVTGSGAVDILMVQEAGAVPA
SATLTEREFSTPGIPMNEYIWNTGTNSRPQELFITYSSKVDAFANGYNLAIVSSKRADE
SATLTEREFSTPGIPMNEYIWNTGTNSRPQELFITYSSKVDAFANGYDPIRQAANWNI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280 ATTGTTTCAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCCAACTGTTGTATCA 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Escherichia coli
Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Escherichia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGACCGATCATCGGCATTAGAATTGGTAATGATGTTTTCTTCTCAACCCATGCATTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               182 CAGGAGITGITTATATATITCTCACGIGITGATGCATTCGCTAACAGAGTAAAICTTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   242 ATTGTTTCAAACAGAAGAGGTGATGAGTGATTATAACCTCCTCCAACTGTTGTATCA
                                                                                                                                                                                                                                                                                                                                   122 AGCACTCCTGGTATTCCGATGAATGAGTATATCTGGAATACCGGAACCAATAGTCGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                            40 GAAAATAAATGGAACACACATGTCCGACAACTTGTTACGGGAACGGGGAGTGCTGTTGATATC
                                                                                                                                                                                                                                                                                                                                                                                                                         GAAAATAAATGGAACACATGTCCGACAACTTGTTACGGGAAGTGGTGCTGTTGATATC
                                                                                                                                                                                                                                               Gaрв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                              Length 495;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 822;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                              4, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Purdy, D.M., Charlton, S.M. and Henderson, I.D. Use of lytic toxins and toxin conjugates Patent: WO 0134205-A 3 17-MAY-2001; Microbiological Research Authority (GB) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
9.4%; Score 44; DB 2; Le
Best Local Similarity 100.0%; Pred. No. 4.9e-16;
Matches 44; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                Score 185; DB 15;
Pred. No. 6.8e-108;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    coli"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362 AATCGGGGCGTGGATTCAGGAGCAATTGT 390

    .822
    /organism="Escherichia col
/mol_type="unassigned DNA"
/db_xref="taxon:562"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX140193 822 bp
Sequence 3 from Patent WO0134205.
AX140193
                                 note="nuclease"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX140193.1 GI:14280533
<1. .>495
/gene="cdtB"
                                                                                                                                                                                                                   Query Match
Best Local Similarity 99.0%;
Matches 385; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             400
                                                                                                                                                                                                                                                                                    ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 9
AX140193
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AY426340 495 bp DNA linear BCT 27-JAN-2004 EBcherichia coli 3180-98 cytolethal distending toxin B subunit (cdtB) gene, partial cds.
AY426340 AY426340. GI:37575476
        /db_xref="G1:20285546"
/translat.don="XNKWNTHYRLVTGSGAVDVXMVQEAGAVPASATLTEREFSTFG
IPMNEYIWNTGTNSRPQELFIYFSRVDAFANRVNLAIVPNRRADEVIVLPPPTVVSRP
IIGIRIGNDVFFSTHALANRGVDSGAIVNSVFEFFNRQTDPIRQAANWMIAG"
                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                     242
                                                                                                                                                                                                                                                                                                                                                                                                               GACCGATCATCGGCATTAGAATTGGTAATGATGTTTTCTTCTCAACCCATGCATTGGCGA 362
                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCGGGGCGTGGATTCAGGAGCAATTGTAAATAGTGTTTTTGAGTTCTTCAACAGACAAA 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TIGITICAAACAGAAGAGCTGATGAGGTGATTGTATTACCTCCTCCAACTGTTGTATGAC 302
                                                                                                                                                                                                                                                                                                                                                                                  302
                                                                                                                                                                                                                                                                                       242
                                                                                                                                                                122
                                                                                                                                                                                  GCACTCCTGGTATTCCGATGAATGAGTATATCTGGAATACCGGAACCAATAGTCGCCCAC 182
                                                                                                                                                                                                                                            Bacherichia coli
Bacherichia coli
Bacteria, Proteobacteria, Gammaproteobacteria, Enterobacteriales;
Enterobacteriaceae, Escherichia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
Submitted (01-OCT-2003) Microbiology, Immunology, and Molecular
Genetics, University of Kentucky, 800 Rose Street, Lexington, KY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 495)
Pickett, C.L., Lee, R.B., Eyigor, A., Elitzur, B., Fox, E.M. and Strockbine, N.A.
Strockbine, N.A.
Cytcher of Variations in Escherichia coli Strains That Produce Cytolethal Distending Toxin
Infect. Immun. 72 (2), 684-690 (2004)
                                                                                                                                                                                                                                                                                        AGGAGTTGTTTATATATTTTCTCACGTGTTGATGCATTCGCTAACAGAGTAAATCTTGCGA
                                                                                                                                                                                                                                                                                                         243 TIGIT CCAAACAGAAGAGCTGAIGAGGGGTGAITGTAITACCICCCCCAACTGIAGGAGGC
                                                                                                                                                                TGATGGTTCAGGAGGCAGGGCAGTACCAGCTTCTGCAACGTTGACTGAGCGAGAATTTA
                                                                                                                                    Gaps

    (bases 1 to 495)
    Pickett, C.L., Lee, R.B., Eyigor, A., Elitzur, B., Fox, E.M.
    Strockbine, N.A.

                                                                                                                                    ö
                                                                                                    Length 463;
                                                                                                                                  IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 298; DB 15; I
Pred. No. 1.7e-181;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .495
/organism="Escherichia coli"
/mol type="genomic DNA"
/strain="3180-99"
/db xref="taxon:562"
<l--->495
/gene="cdtB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cocation/Qualifiers
                                                                                                    tch 63.7%;
al Similarity 99.5%;
398; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40536, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14742509
                                                                                                                                                                                                                                                                                                                                                                                                                                                         303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    423
                                                                                                           Query Match
Best Local S
Matches 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                423
                                                                                                                                                                                                                                                                                                                                                            243
                                                                                                                                                                                                                                                                                                                                                                                                                         303
                                                                                                                                                                                                      63
                                                                                                                                                                                                                                                                 123
                                                                                                                                                                                                                                                                                                 183
                                                                                                                                                                                                                                                                                                                              183
                                                                                                                                                                        63
                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
AY426340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
```

ò 셤

```
/transl_table=11
/product="hypothetical protein"
/product="hypothetical"
/protein | die" AAT92044.1"
/db xref="G1:5083074"
/translation="MRDITLRFDNREQFNAIVYDSGLFSLEEENGVLVDVIGCIIDYE
RPENERCTGIDRGGFFVNNRIVDGSKNISSLMPFITTDQHVRTWA"
                                                                                                     STDEFEFXYGRFTVGSDIAGTTTGRNICTVAGNKGIDVTGDDQYSKGFYVTASFRVRS
DLNVDARIREFRYNSEGYTFCDAYLSLQTHELQITGGNAQLLTANFEIDPGSGWIYF
QATLKCLPEWGWYGTQLQIADDRAVGSFATGDNI TVTTPQFFSYGACATSFIITTTFPA
TRASDLCKFPLAKWYTTMPFTFWYEVHKWWFISHNAAPRVIDSENHQSGGPFIMGFGS
SGTISQDGYSYCDIGGANRRVYESCGVRDLVMDSGLRLTA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /product="hypothetical protein"
/protein id="hAT92046.1"
/bc.tein id="RAT92046.1"
/bc.xref="GI:S091076"
/translation="MUTIPFLHALCAVAAQVLVGLFTGNWAYGAIAGCTFFIAREHTQ
AEYRWIEMFGHGKRINMPWWGGFDLRAWDMASMMDFAVPVVACLLVWLLVNR"
       AAESESAAAGSATSAAGSATAAANSOKAAKTSETNAKSSOTAAKTSETNAKASETAAK
RODAAAQSESAAAGSATAAANSOKAAKTSETNAKTSETKAAASETEATSAENA
ARIAEDAADPAADELDIHLPLINDSLEATTGYAPGYKTITIGSDEITWRVNGTCOPS
WASSATYIDKSGHITVAGNNVPRFEKYGLLIENQRINMFVNSFNPDAWNKSGGISVTS
                                                                                                                                                                                                                                                                              details recorded"
/note="Orf4; similar to c3149 from Escherichia coli CFT073
(serotype 06:H1:K?)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /codon start=1
/transLiable=11
/product="cytolethal distending toxin type IV subunit A"
/product="cytolethal distending toxin type IV subunit A"
/product="cytolethal distending toxin type IV subunit A"
/product="col:50983077"
/translation="MDKKLTAFLCTLIITGCSDGIGDSPSPPGKNVELVGIPGGGVAV
ASNGTSPTFGSNSTGPPDVSIMSTGGAMLTVWARPVRNWLWGYTPFDSVSFGENRNWK
VDGKDAGTYKFVNNAQGTCMRAPKNGVIHNTCDDNSLSGEPGLLPSTNGNVLIRSSA
LQTGIRADXLSRTILESPRAFITILEKCPGAKEETQEMLWAISPPVRAAKPNLIKPELR
PERPLPIPPHDKPDGMEGV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="Orfs; similar to c3147 from Bacherichia coli CFT073 (serotype O6:H1:K?)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /inference="non-experimental evidence, no additional details recorded" hote="Orifs; similar to hypothetical protein in EAEC 042" /codom start=1 /transl_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="CdtB-IV"
/codon start=1
/rransI table=11
/producE="cytolethal distending toxin type IV subunit B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4699. .4989
/inference="non-experimental evidence, no additional
                                                                                                                                                                                                                                                            'inference="non-experimental evidence, no additional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         details recorded"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/transT_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="cdtA-IV"
5502. .6215
/gene="cdtA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'note="CdtA-IV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note="cdtB-IV"
                                                                                                                                                                                                                                                                                                                                                        codon start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5502. .6215
/gene="cdtA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6212. .7033
/gene="cdtB"
                                                                                                                                                                                                                             . .3992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4005. .4688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
                                                                                                                                                                     ANST8329 10241 bp DNA linear BCT 01-APR-2005 Escherichia coli strain 28C lambdoid prophage host specificity protein gene, partial cds; putative membrane protein precursor, putative tail fiber protein, hypothetical proteins, cytolethal distending toxin type IV subunit A (cdtA), cytolethal distending toxin type IV subunit B (cdtB), and cytolethal distending type IV subunit C (cdtC) genes, complete cds, and hypothetical ANST8329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
Submitted (22-MAR-2004) UMR1225, INRA-ENVT, 23 Chemin des Capelles,
Toulouse 31000, France
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /trānslation="lFmweVFLKYLTAPTITSGGNPPAFSLTPDGRLTAKUADISGNV
MANSGTLMWYTINQMCRILGKLSANDLOSDIVTWYGRAFPKNGSYASGTITVTYYDDQ
APPRQIVIPPYLFRGGKHEWFNSNNQDSYWYSTCKLOYLKNGGEIFQDPATDVSRVFS
SVIDMPAGHGHVTLTFNVSSYGANNWTPTTSISDLLVVWKKSTAGITIS"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /translation="maavk1sgvlkDgagkp1gncT1glkakrnsttvlvntvasenp
Deagrysmdveygqysv1llvegpppshagt1tvyegsrpgtlndflgamteedympe
Alrrfeamyeevarnaeaasqsaaaakksetaaassknaaktsetnaansaqaaatsk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="genomic DNA"
/derain="28C"
/db_xref="taxon:562"
/note="gerogroup: 075; pathovar: ExPEC; endogenous_virus:
lambdoid prophage"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ledger, N., Pujiwara, T., Boury, M., Sugai, M. and Oswald, E.
Escherichia coli 28C (075) cytolethal distending toxin type IV
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1367. .3535
/note="Orf3; similar to EC81650 from Escherichia coli
0157:H7 Sakai"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        702. .1202
/note="Orf2; similar to membrane protein Lom"
/product_"putative tail fiber protein"
/protein id="AAT92043.1"
/db_xref="GI:50983073"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /codon_start=1
/transl_table=11
/product="host_specificity protein"
/protein_id="AAT92041.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   coli"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Enterobacteriaceae; Escherichia.
1 (bases 1 to 10241)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .10241
/organism="Escherichia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   db_xref="GI:50983071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
/transl_table=11
                                                                                                                                                                                                                                                                                                                                                                                              AY578329.1 GI:50983070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <1. .633
/note="Orf1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 10241)
                                                                                                                                                                                                                                                                                                                                                                                                                                            Escherichia coli
Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oswald, E
                                                                                                                                                                        LOCUS
DEPINITION
                                                                                                                       RESULT 10
AY578329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REPERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
```

gene

CDS

```
Zebrafish DNA sequence from clone DKEY-263L8 in linkage group 1, Complete sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tränslation="QLVTGSGAVDILMVQBAGSIPSSATLTEREFRTPGIPMNEYIWN
TGTNSRPQQLFIYFSRTDALSNRVNLAIVSNRRADEVIVLSPPTVASRPIIGIRIGND
VFFSTHALANRGIDSGAIVNSVFEFFNRQTDPIRQAA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cyprinidae; Danio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (10-NOV-2005) Wellcome Trust Sanger Institute, Hinxton, Cambridgeshire, CB10 1SA, UK. E-mail enquirles: zfish-help@sanger.ac.uk Clone requests: help@sanger.ac.uk/Projects/D_rerio/faqs.shtml#dataeight on Nov 10, 2005 this sequence version replaced gi:41392538.
                                                                                                                                                      Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Escherichia.
1 (bases 1 to 417)
                                                                                                                                                                                                                           Toth I., Herault, F., Beutin, D. and Oswald, E. Production of Cytolethal Distending Toxins by Pathogenic Escherichia coli Strains Isolated from Human and Animal Sources: Establishment of the Existence of a New cdt Variant (Type IV) J. Clin. Microbiol. 41 (9), 4285-4291 (2003)
Escherichia coli cytolethal distending toxin B type IV (cdtB-IV)
                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (11-OCT-2002) UNR960 de Microbiologie Moleculaire, INRA-ENVT, 23 chemin des Capelles, Toulouse 31000, France Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /transI_table=11
/product="cytolethal distending toxin B type IV"
/protein id=18A025510.1"
/db.xef="G1:34482171"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 417;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="serogroup: 075; pathovar: ExPEC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8.8%; Score 41; DB 15; I
100.0%; Pred. No. 4.2e-14;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               coli"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Escherichia (
/mol_type="genomic DNA"
/strain="28C"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     db_xref="taxon:562"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BX465849.10 GI:81685375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <1. .>417
/gene="cdtB-IV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene="cdtB-IV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Danio rerio (zebrafish)
Danio rerio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=2
/transl_table=1
                                                                            AY162217.1 GI:34482170
                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 417)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <1. .>417
                          gene, partial cds.
AY162217
                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
                                                                                                                         Escherichia coli
Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 41; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Barker, G.
                                                                                                                                                                                                                                                                                                                                                                                                   Oswald, E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
BX465849/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
              DEFINITION
                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                JOURNAL
PUBMED
REFERENCE
                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene
                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LDWKFINDAJIKGAIRWDLMPQVSVGAAGWTTLGGKGGNMIDEDWQDPDKFGIWTDES
RHPDTRLNFANEFDLNIKGWLLNESNYRLGLWAGYQDSRYSFTARGGSYIYSDEGFRD
DGSIFUNGERALGYKQRFRMPYIGLITGSYRYEDPEFGGTFKYSGWVEASDNDEHYARV
KRITYRSNYKDQNYRSIAVNAGYYYTPNAKVYVEGAMNRVTNKKGDTSLYDHNDNTSE
YSKNGAGIENYNFITTAGLKYTF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BCT 05-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /translation="MRKIJAHFKIVLTLLPVTVSAQOIEWQSCMTSQFNHWFGEEKP
SPDLLCGYLSVPLKYTDTGGDASYEKKSQVKLALTKLPAKSKHKGSILIISGGFGLPG
INPYINFWPWTVNLRESWOIIGPPFRKVGQSTPTINCQSDTEIQENITEKQRVLNKI
NACINHTGASVTRHIGSNEAVYDIDRIKQALGDKQLTAVAYSYGTQLAALYAERFPTN
VRSIVLDGVVDIDDLEDNFTWQLKQAQSYQETFDRRAKTKSCFLSDDBDKAITQ
FHELLLKLHHRPLIGSNEAVISSDELIESTTDLLLWRSSWPTLATAIRQFSQGIVSNE
FETALGAPIASEPSDALGYILCYDQCDEKTRPERKSKDALANAFPAINFDNGRSD
SPDFCELWPIHSDLNKTRLKNTVLFSGLLFVAHKYDFTFWINARKWAEKFSSPLITI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                        /translation="MRILITIVALLINGCSSDVVNQRGLLTQFAGNNAPGDDEPRPVL VSIRNYLTGGILRNPVGRDFNVNNWVISEVKTNDLDLISAPGGHVQIKNPDGNECLAI LNGQLAVAKQCTESNRNALFTFITSETGAVQIKSIGNGQCLGNGESVTDFKLTKCVND LSRPFDVYSGLLMMLNPPLSPALMSPLTI"

COMplement (7672 . 9156)

/inference="non-experimental evidence, no additional details recorded"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             translation="SFASTETLSFTPDNINADISLGTLSGKTKERVYLAEEGGRKVSQ"
                                                                              RQLVTGSGAVDILMVQEAGSIPSSATLTEREFRTPGIPMNEYIMNTGTNSRPQQLFIY
FSRTDALSNRVNLAIYSNRRADEVIVLSPPTVASRPIIGIRIGNDVFFSTHALANRGI
DSGAIVNSVFEFFNRQTDPIRQAANMIAGDFNRSPAMLFSTLEPGIRNHVNIIAPPD
PTQASGGVLDYAVVGNSVSFVLPLLRASLLFGLLRGQIASDHFPVGFIPGRGARR"
                                             Ĝb_xref="G1:50983078"
'translation="MKKLLFILMILPGISFADLSDFKVATWNLQGSNAPTENKWNTHV
                                                                                                                                                                                                                                                                                                                                            /product="cytolethal distending toxin type IV subunit C"
/protein_id="AAT92049.1"
/db_xref="GI:50983079"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="Rorfl; similar to ECs1662 from Escherichia coli 0157:H7 Sakai; contains a putative conserved domain (alpha/beta hydrolase fold) found in a wide range of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    note="Rorf2; similar to outer membrane protease OMPT protease VII precursor)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /inference="non-experimental evidence, no additional details recorded"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 10241;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NGDGHTLALTGVNLCVDKAVVHHLLTPQKTEDISCPGNAEVDIQ"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 15; Lens.
3. 5.9e-16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6743 GATCCTATAAGACAGGCCGCTAACTGGATGATTGCAGGAGATTT 6786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      425 GATCCTATAAGACAGGCCGCTAACTGGATGATTGCAGGAGATTT 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /codon start=2
/transl_table=11
/product="hypothetical protein"
/protein_id="AAT92051.1"
/db_xref="GI:50983081"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
transI_table=11
fproducf="hypothetical protein"
protein_id="AAT92056.1"
/db_xref="GI:50983080"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
9.4%; Score 44; DB
Best Local Similarity 100.0%; Pred. No. 5.9
Matches 44; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complement (9341. .>10241)
                       protein_id="AAT92048.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      417 bp
                                                                                                                                                                                                                                                 7030. .7602
/gene="cdtC"
/note="cdtC-IV"
                                                                                                                                                                                                                       /note="cdtC-IV"
                                                                                                                                                                                                                                                                                                                      /codon start=1/transl table=
                                                                                                                                                                                     7030. .7602
/gene="cdtC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AY162217
```

CDS

RESULT 11 AY162217 LOCUS

ద ઠ

ORIGIN

ö

Gaps

```
Web site: http://www.hgsc.bcm.tmc.edu/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: hgsc-helpobcm.tmc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                             This sequence was finished as follows unless otherwise noted: all regions were either double-stranded or sequenced with an alternate chemistry or covered by high quality data (i.e., phred quality >= 30); an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by at least one subclone; and the assembly was confirmed by restriction digest, except on the rare occasion of the clone being a YAC.

The following abbreviations are used to associate primary accession numbers given in the feature table with their source databases:

Em: EMBL; Sw:, SWISSPROT; Tr:, TREMBL; Wp:, WORNPEP; Information on the WORNPEP database can be found at http://www.sanger.ac.uk/Projects/C elegans/wormpep Clone-derived Zebrafish pUC subclones occasionally display inconsistency over the length of mononucleotide A/T runs and conserved TA repeats. Where this is found the longest good quality representation will be submitted as misc-feature 'unsure' are part of a tandem repeat of more than 10kb in length where it has not been possible to anchor the base differences between repeat copies. The region has been built up based on the repeat element to match the total size of repeat indicated by restriction digest, but repeat copies may not be in the correct order and the usual finishing criteria may not apply.

VECTOR: Prodeice may not apply.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AC128885.3 GI:25139458
HTG; HTGS_PHASE1; HTGS_ENRICHED.
Rattus norvegicus (Norway rat)
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mamwalla; Butheria; Buarchonicglires; Rattus.
Sciurognathi; Murcidea; Muridae; Murinae; Rattus.
1 (bases 1 to 141587)
Muzhy, D. Marie., Metzker, M. Lee., Abramzon, S., Adams, C., Alder, J., Anjen, C., Allen, H., Alsbrooks, S., Amin, A., Anguiano, D., Anyalebechi, V., Aoyagi, A., Ayodeji, M., Barnstead, M., Benahmed, F., Balwalo, K., Blair, J., Barber, M., Barnstead, M., Benahmed, F., Biswalo, K., Blair, J., Blankenburg, K., Blyth, P., Brown, M., Bryant, N., Buhay, C., Burch, P., Burrell, K., Calderon, E., Cardenas, V., Carter, K., Cavacos, I., Ceasar, H., Center, A., Clacko, J., Chavez, D., Chen, R., Cox, C., Coyle, M., Cree, A., D'Souza, L., Cleveland, C., Cockell, R., Cox, C., Coyle, M., Cree, A., D'Souza, L., Davila, M.L., Davis, C., Davy-Carroll, L., De Anda, C., Dederich, D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus clone CH230-334P14, *** SEQUENCING IN PROGRESS ***, 4 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.5%; Score 21; DB 11; Length 136195; 100.0%; Pred. No. 0.68; 1. Indels 0; Mismatches 0; Indels 0;
Center: Wellcome Trust Sanger Institute
                                                               Web site: http://www.sanger.ac.uk
Contact: zfish-help@sanger.ac.uk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Danio rerio"
/mol_type="genomic DNA"
/db_xref="taxon:7955"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /chromosome="1"
/clone="DKEY-263L8"
/clone_lib="DanioKey"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95145 rriricacricricaacaca 95125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       400 TTTTGAGTTCTTCAACAGACA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . .136195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.0
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
AC128885
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
```

ORIGIN

셤

```
Delgado, O., Denson, S., Deramo, C., Ding, Y., Dinh, H., Divya, K., Brager, M., Dragner, C., Evans, C.A., Falls, T., Fan, G., Fanda, A., Escotto, M., Elaggan, C.A., Falls, T., Fan, G., Francto, M., Egan, A., Escotto, M., Elaggan, C.A., Falls, T., Fan, G., Fraser, C.M., Gablai, A., Ganta, R., Garner, T., Garza, M., Gebregoorgis, E., Geer, K., Gill, R., Grady, M., Guerra, W., Guerara, W., Guarara, E., Haaland, W., Hamil, C., Hamilton, C., Hamilton, K., Harvey, Y., Hauland, P., Hamilton, E., Hadison, A., Hogues, M., Jackson, L., Jackson, L., Jang, H., Lorado, A., Honges, M., Jackson, L., Jang, H., Lorado, R., Johnson, R., Liu, W., Liu, Y., Landan, J., Lewis, L., Karpathy, S., Kelly, S., Kelly, S., Khan, Z., Khan, Z., Kowis, C., Kraft, C.L., Lebow, H., Levan, J., Lewis, L., Liu, J., Liu, W., Liu, Y., London, P., Longore, S., Lopez, J., Loulseged, H., Locado, R.J., Lu, X., Man, J., Manden, M., Marlin, R., Martin, R., Martinez, E., Mangum, A., Maneshwari, M., Martin, G., Martin, R., Martin, C., Mangum, A., Mangum, B., Martin, Morris, S., Muridas, M., Martin, S., Parks, K., Plopper, P., Polacker, P., Polacker, P., Pally, M., Newton, N., Noryen, S., Parks, K., Redliy, M., Ren, Y., Reuter, M., Richards, S., Brain, H., Shetty, J., Shartbey, N., Varle, P., Shartbey, N., Varle, P., Wull, J., Mang, O., Wang, J., Warten, R., Weit, X., Mang, J., Warde, N., Yakub, S., Yen, J., Wang, O., Wang, J., Warten, R., Weit, X., Zhoo, S., Dunn, D., Von, V., Williams, O., Walls, R., Wull, S., Smith, D., Wright, D., Wright, R., Wull, S., Smith, D., Wall, M., Sacott, G., Sael, R., Sael, M., Wall, S., Sael, M., Wall, S., Sael, Sael, S., Sael, S., Sael, S., Sael, S., Sael, S., 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       State of the sequencing of the sequencing of the sequence of the sequencing consortium.

It denome Sequencing Consortium.

Direct Submission

Bylor plaza, Houston, TX 77030, USA

Of Molecular and Human Genetics, Baylor College of Medicine, One Baylor plaza, Houston, TX 77030, USA

On Nov 20, 2002 this sequence version replaced gi:23195910.

The sequence in this sequence version replaced gi:23195910.

The sequence in this assembly is a combination of BAC based reads and whole genome shotgun sequencing reads assembled using Atlass (http://www.hgsc.bcm.tmc.edu/projects/rat/). Each contig described in the feature table below represents a scaffold in the Atlas assembly (a 'contig-scaffold'). Within each contig-scaffold, individual sequence contigs are ordered and oriented, and separated by sized gaps filled with Ns to the estimated size. The sequence contigs within a contig-scaffold that consist entirely of whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (24-JUL-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Center: Baylor College of Medicine
Center code: BCM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----- Genome Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 141587)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Worley, K.C.
Direct Submission
```

```
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
CONSRIM
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Butheria; Laurasiatheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovinae; Bos.

1 (Bases I to 191669)

Muzny, D., Adams, C., Agbai II,O., Allen,C., Alsbrooks,S., Archer,P., Arredondo,H., Bandaranaike,D., Bangurai,D., Beltran,B., Beltran,R., Bradaucci,A., Bisawlo,K., Blyth,P., Bonham,H., Buhay,C., Burch,P., Cadoree,I., Canada,A., Cardenas,V., Carter,K., Cavazos,I., Chacko,J., Chahrour,M., Chavez,D., Chen,A., Che
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  191669 bp DNA linear HTG 31-JAN-2006
Bos taurus clone CH240-245G12, *** SEQUENCING IN PROGRESS ***, 29
Mordered pleces.
                                                                                                                                                                                                                                                                                                                               NOTE: Estimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html).
NOTE: This is a 'working draft' sequence. It currently consists of 4 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
Center clone name: CH230-334P14
------ Summary Statistics
Assembly program: Phrap, version 0.990329
Consensus quality: 127809 bases at least Q40
Consensus quality: 131624 bases at least Q30
Consensus quality: 13169 bases at least Q30
Sensensus quality: 13169 bases at least Q30
Senimated insert size: 129736; sum-of-contigs estimation
Quality coverage: 6x in Q20 bases; sum-of-contigs estimation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 4.5%; Score 21; DB 12; Length 141587; Best Local Similarity 100.0%; Pred. No. 0.68; Astches 21; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420 105519: gap of unknown length
420 105519: gap of unknown length
520 138656: contig of 33137 bp in length
557 138756: gap of unknown length
757 140163: contig of 1407 bp in length
164 140263: gap of unknown length
264 141887: contig of 1324 bp in length.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AC175073 GI:86200618
AC175073.2 GI:86200618
HTG; HTGS PHASEL; HTGS_DRAFT; HTGS_ENRICHED.
BOB taurum (cattle)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Rattus norvegicus"
/mol_type="genomic DNA"
/db_xref="taxon:10116"
/clone="CH230-334P14"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              105420. .105519
/estimated length=unknown
105520. .107531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140164. .140263
/estimated_length=unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'estimated_length=unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              contig"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  388 TGTAAATAGTGTTTTTGAGTT 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          138657. .138756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .141587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note="wgs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       105520
138657
138757
140164
140264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           105420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
AC175073/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
```

쉱

```
Durect Submission

Direct Submission

Submitted (31-JAN-2006) Human Genome Sequencing Center, Department Submitted (31-JAN-2006) Human Genetics, Baylor College of Medicine, One of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

Baylor Plaza, Houston, TX 77030, USA

Daylor plaza, Houston, TX 77030, USA

Daylor plaza, Bod this sequence version replaced gi:84490450.

The sequence in this assembly is a combination of BAC based reads and whole genome shotgun sequencing reads assembled using Atlas and whole genome shotgun sequencing represents a scaffold in the Atlas in the feature table below represents a scaffold in the Atlas in the feature table below represents a scaffold in the Atlas in the feature contige are ordered and oriented, and separated individual sequence contigs are concerned and criented, and sequence may extend beyond the ends of the clone and there may be sequence contigs within a contigue scaffold that consist entirely of whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence only contigs will be indicated in the feature table.
Donlin,J., McCauley,S., Dugan-Rocha,S., Dunn,A., Durbhn,K.,
Dridda,D., Egan,A., Escotto,M., Espinosa,V., Eugene,C., Fa,M.,
Fernandez,S., Fernando,P., Flagga,N., Footbes,L., Footer,T.,
Gankin,C., Gench,S., Ghose,S., Gill,R., Garcia,R., Garner,T.,
Gankin,C., Gench,S., Ghose,S., Gill,R., Gonzalez,D.,
Gankin,C., Gench,S., Ghose,S., Gill,R., Gonzalez,D.,
Hander,G., Hamilton,K., Harbes,B., Harris,R., Havlak,P.,
Hawes,A., Hawkins,E., Hayes,S., Hemphill,L., Herrandez,J.,
Hines,S., Hitchens,M., Hodgson,A., Hogues,M., Hollins,B.,
Hines,S., Hitchens,M., Hodgson,A., Hogues,M., Hollins,B.,
Jacob,L., Jiang,H., Johnson,B., Johnson,R., Kaalafus,K., Kelly,S.,
Keys,T., Khan,Z., Linnell,M., Liu,W., Liu,Y., Liyange,D.,
Li,Y., Li,Z., Linnell,M., Liu,W., Liu,Y., Liyange,D.,
Li,Y., Li,Z., Linnell,M., Liu,W., Liu,Y., Liyange,D.,
London,P., Lopez,J., Lorensubawa,L., Lozado,R., Kowis,C., Lewis,C., Lara,F.,
London,P., Lopez,J., Lorensubawa,L., Lozado,R., Matthez,B.,
Mortay,D., Nazarith,L., Ngo,D., Nayen,M., Martinez,B.,
Mursay,D., Nazarith,L., Ngo,D., Nayen,M., Martinez,B.,
Mursay,D., Nazarith,L., Ngo,D., Nayen,M., Martinez,B.,
Nott,A., Nwaokelemeh,O., Obregon,M., Ochi-Okorie,C., Odeb,E.,
Patel,V., Paul,H., Perez,A., Perez,A., Perez,A., Perez,J., Percosino,J., Pham,Y.,
Rubet,C., Rodriguez,F., Rojas,A., Ruiz,S., Jana,M., Sanders,M.,
Rubet,C., Rodriguez,F., Rojas,A., Ruiz,S., Shen,H., Sanex,J.,
Rubet,C., Rodriguez,F., Rojas,A., Ruiz,S., Sana,M., Sanders,M.,
Syatek,A., Saneco,H., Walker,B., Wang,O., Wang,S., Waren,J.,
Volkov,A., Waldron,L., Walker,B., Wang,O., Wang,S., Wall, Mei,X., Wheeler,D., Williams,G., Wang,S., Rang,J., Takon,J., Walker,B., Wang,O., Wang,S., Rang,L., Takon,J., Walker,B., Wang,O., Wang,S., Rang, Under,B., Walker,B., Wang,O., Wang,S., Shang, Under,B., Walker,B., Wang,O., Wang,S., Sane,B., Walker,B., Wang,O., Wang,S., Sane,B., Wang,O., 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Direct Submission
Submitted (06-JAN-2006) Human Gencome Sequencing Center, Departmer
Submitted (06-JAN-2006) Human Genetics, Baylor College of Medicine, One
Baylor Plaza, Houston, TX 77030, USA
3 (bases 1 to 191669)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Center project name: FNEW
Center clone name: CH240-245G12
------ Summary Statistics
Assembly program: Atlas 3.0;
Consensus quality: 168512 bases at least Q40
Consensus quality: 171717 bases at least Q30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Center: Baylor College of Medicine Center code: BCM to site: http://www.hgsc.bcm.tmc.edu/Contact: hgsc-help@bcm.tmc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bovine Genome Sequencing Consortium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ----- Project Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 191669)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Worley, K.C.
```

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Buarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Murinae; Rattus.

E. (Dases 1 to 23837)

Muzny, D.Marie., Metzker, M.Lee., Abramzon, S., Adams, C., Alder, J., Allen, C., Allen, H., Alsbrooks, S., Amin, A., Anguiano, D., Banderin, D., Bandaranaike, D., Barber, M., Barnstead, M., Benamed, F., Bilan, N., Buhay, C., Burch, P., Burrell, K., Calderon, E., Cardenas, V., Carter, K., Cavazos, I., Ceasar, H., Center, A., Clacko, J., Chavez, D., Chen, G., Chen, R., Chen, Y., Chen, Z., Chu, J., Cleveland, C., Cockrell, R., Cox, C., Coyle, M., Cree, A., D. Souca, L., Davila, M.L., Davis, C., Davy-Carroll, L., De Anda, C., Dederich, D., Delgado, O., Denson, S., Deramo, C., Ding, Y., Dinh, H., Divya, K., Ban, A., Escotto, M., Eugene, C., Evans, C.A., Falls, T., Ferner, P., Fernandez, S., Filley, M., Palggi, N., Porbes, L., Foster, M., Fraser, C. M., Ganta, R., Garner, T., Garza, M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NA linear HTG 19-NOV-2002
*** SEQUENCING IN PROGRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 4.5%; Score 21; DB 12; Length 191669; 1 Similarity 100.0%; Pred. No. 0.7; 21; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AC107439.5 GI:25075945
HTG; HTGS_PHASB1; HTGS_DRAFT; HTGS_ENRICHED.
Rattus norvegicus (Norway rat)
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rattus norvegicus clone CH230-229M1, ***, 8 unordered pieces. AC107439
                                                                                                                                                                                                                                                                                                                                                                  /estimated_length=unknown
16368. .36417
/estimated_length=50
                                                                                                                                              6681. .6780
/estimated length=unknown
11437. .12103
                                                                                                                                                                                                                                                                                                                                                                                                                                                           /estimated length=50
55331. 55380
/estimated length=50
57121. 65692
/estimated length=8572
68985. 69034
                                'mol_type="genomic DNA"
'db_xref="taxon:9913"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    238377 bp
                                                                                                                                                                                                                      /estimated length=667
13464. .13670
                                                                                                                                                                                                                                                                                                                     estimated length=409
13393. .21492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'estimated length=872
12514. .82563
                                                                               clone="CH240-245G12"
                                                                                                                               estimated_length=714
                                                                                                                                                                                                                                                                     estimated_length=207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'estimated_length=50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /estimated_length=50
77567. .78438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          length=50
                                                                                                                                                                                                                                                                                                                                                                                                                      length=50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92824. .92873
/estimated_length=50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29658 AATTGTAAATAGTGTTTTTGA 29638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  385 AATTGTAAATAGTGTTTTGA 405
                                                                                                                                                                                                                                                                                                                                                                                                                                       12997. .43046
                                                                                                                                                                                                                                                                                            17095. 17503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     . .71052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          estimated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AC107439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
AC107439/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                  gap
                                                                                                                                                                                                                                                 gap
                                                                                                                                                                                                                                                                                                 gap
                                                                                                                                                                                                                                                                                                                                                gap
                                                                                                                                                                                                                                                                                                                                                                                             gap
                                                                                                                                                                                                                                                                                                                                                                                                                                            gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                  NOTE: Estimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank draft_data.html). NOTE: This is a 'working draft' sequence. It currently consists of 29 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
Consensus quality: 173988 bases at least Q20
Estimated insert size: 175814; sum-of-contigs estimation
Quality coverage: 5x in Q20 bases; sum-of-contigs estimation
                                                                                                                                                                                                                                                                                                                                    contig of 1361 bp in length gap of 714 bp contig of 4605 bp in length contig of 4656 bp in length contig of 4656 bp in length gap of 667 bp contig of 67 bp in length gap of 207 bp
                                                                                                                                                                                                                                                                                                                                                               714 bp
of 4605 bp in length
unknown length
of 4656 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     contig of 1968 bp in length gap of 50 bp contig of 6514 bp in length gap of 872 bp contig of 4075 bp in length gap of 50 bp contig of 10260 bp in length gap of 50 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      bp
12284 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     bp
12749 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14875 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10260 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28203 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17087 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3889 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8572 bp
of 3292 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          contig of 3545 bp in length gap of 602 bp contig of 7670 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       bp
6239 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3424 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6579 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1740 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3317 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cnown length
2001 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            length
bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          length
bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5909 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             contig of 6239 bp in ]
gap of unknown length
contig of 28203 bp in
gap of 50 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     contig of 1170
gap of unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gap of unknown
contig of 3742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     contig of 1121
gap of unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gap of unknown contig of 2837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 contig of
gap of 409
contig of
gap of unk
contig of
gap of 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       contig of
gap of unk
contig of
gap of unk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               contig of
gap of 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           contig of
gap of 857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                contig of
gap of 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   contig of
gap of 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gap of 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gap of 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               contig
gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
1. .191669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             contig
gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       contig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161457:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   191669:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13670:
17094:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161407:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181866:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           43046:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 71052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    108057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13671
17095
21393
36149
36418
36418
42997
42997
42997
42097
7121
6569
68985
69035
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71053
71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96191
96241
99786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     108058
108108
120857
120907
126816
126866
133105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161458
```

source FEATURES

```
NOTE: Estimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html).
NOTE: This is a 'working draft' sequence. It currently consists of 8 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
Consensus quality: 179520 bases at least Q20
Estimated insert size: 178417; sum-of-contigs estimation
Quality coverage: 6x in Q20 bases; sum-of-contigs estimation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.5%; Score 21; DB 12; Length 238377; 100.0%; Pred. No. 0.71; tive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           10510: gap of unknown length
10510: gap of unknown length
20957: contig of 10447 bp in length
21057: gap of unknown length
224179: contig of 203122 bp in length
224279: gap of unknown length
229532: contig of 5253 bp in length
229532: contig of 5253 bp in length
239532: contig of 1232 bp in length
231065: gap of unknown length
231097: contig of 1232 bp in length
231097: contig of 1232 bp in length
231097: contig of 1232 bp in length
231097: contig of 2684 bp in length
234781: contig of 2684 bp in length
238177: contig of 3496 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /estimated length=unknown 10511. .11540 /noce="wag contig" 20558. .21057 /estimated length=unknown complement [200261. .20154) /note="clone boundary clone_end:Sp6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
1. 238377
/organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="wgs_end_extension
clone_end'Sp6"
22953. 229632
/estimated length=unknown
230666. 230765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             end sequence:BZ108180"
224180. .224279
/estimated length=unknown
224280. .225441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          231998. . 232097
/estimated length=unknown
234782. . 234881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       length=unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /estimated_length=unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Search completed: November 4, 2006, 01:20:27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol type="genomic DNA"
/db xref="taxon:10116"
/clone="CH230-229M1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  388 TGTAAATAGTGTTTTTGAGTT 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .1567
/note="wgs_contig"
10411. .10510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              estimated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.0
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10511
20958
21058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       229633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 234882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             230666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        231998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          232098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              224180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            229533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Univers summission
Unpublished

2 (bases 1 to 238377)

8 Worley, K.C.

2 (bases 1 to 228377)

8 Morley, K.C.

Direct Submission

1 Submitted (21-JAN-2002) Human Genome Sequencing Center, Department Submitted (21-JAN-2002) Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

23 (bases 1 to 238377)

8 Rt Genome Sequencing Consortium.

1 Direct Submission

1 Submitted (19-NOV-2002) Human Genome Sequencing Center, Department Submitted (19-NOV-2002) Human Genome Sequencing Center, Department Submitted (19-NOV-2002) Human Genome Sequencing of Medicine, One Baylor Plaza, Houston, TX 77030, USA

1 Nov 19, 2002 this sequence version replaced gi:23603151.

2 The Sequence in this assembly is a combination of BAC based reads and whole genome shotgun sequencing reads assembled using Atlas and whole genome shotgun sequencing reads assembled using Atlas in the feature table below represents a scaffold in the Atlas assembly (a 'contigg-scaffold'). Within each contigg described individual sequence contigg are ordered and oriented, and separated by sized gaps filled with Ns to the estimated size. The sequence hay extend beyond the ends of the clone and there may be sequence contigs within a contigg scaffold that consist entirely of whole genome shotgun sequence casds. Both end sequences and whole genome shotgun sequence casds. Both end sequences and whole genome shotgun sequence only contigs will be indicated in the feature table.
                 Gebregeorgis, E., Geer, K., Gill, R., Grady, M., Guerra, W., Guevara, W., Gunaratne, P., Haaland, W., Hamil, C., Hamilton, C., Hamilton, K., Harrandaz, J., Harvalak, P., Hawes, A., Hodgson, A., Harrandaz, J., Howells, S., Hulyk, S., Hume, J., Idlebird, D., Jacob, L., Jang, H., Johnson, R., Johnson, R., Jolivet, A., Karpathy, S., Kelly, S., Kelly, S., Kang, L., King, L., Kovar, C., Kowis, C., Labow, H., Levan, J., Lewis, L., Liz, Z., Liu, J., Lordon, P., Longacre, S., Lopez, J., Loulseged, H., Lozado, R.J., Lu, X., Ma, J., Lordon, P., Londacre, S., Lopez, J., Margum, B., Martin, K., Martin, R., Martinez, E., Mangum, B., Martin, K., Martin, K., Martin, R., Martinez, E., Mangum, B., Martin, K., Martin, R., Martinez, E., Mangum, P., Martin, K., Martin, R., Martinez, E., Paul, H., Perez, J., Perez, J., Palas, S., Paul, S., Paul, P., Poindexter, A., Popovic, D., Primes, E., Parks, K., Paul, S., Poindexter, A., Paolovic, D., Primes, E., Paul, M., Ren, Y., Reuter, M., Richards, S., Riegs, F., Paul, M., Savery, G., Scherez, S., Scott, G., Shataman, S., Shen, H., Sanders, W., Savery, G., Scherez, S., Sorelle, R., Sander, M., Savery, G., Scherez, S., Sorelle, R., Sander, M., Strong, K., Strong, X.-Z., Sorelle, R., Martin, M., Strong, K., Strong, X.-Z., Sorelle, R., Walker, B., Wang, G., Wang, S., Walren, R., Walker, B., Walker, B., Walker, B., Walker, B., Walker, B., Walker, S., Millean, G., Walles, R., Weise, R., Malten, R., Walker, S., Shon, J., Vallas, R., Weise, R., Marten, A., Walker, S., Shon, J., Walker, S., Shon, J., Walten, S., Marten, A., Walker, S., Shon, J., Walker, S., Marten,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Web Bite: http://www.hggc.bcm.tmc.edu/
Contact: hggc-help@bcm.tmc.edu
Contact: hggc-help@bcm.tmc.edu
Center project normation
Center clone name: GNII
Center clone name: GNII
Center clone name: CH230-229MI
Assembly program: Phrap; version 0.990329
Consensus quality: 176033 bases at least Q40
Consensus quality: 176138 bases at least Q30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Center: Baylor College of Medicine Center code: BCM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
```

COMMENT

ö

Gaps

Job time : 2602.63 secs

This Poge Bionk (uspic)

,